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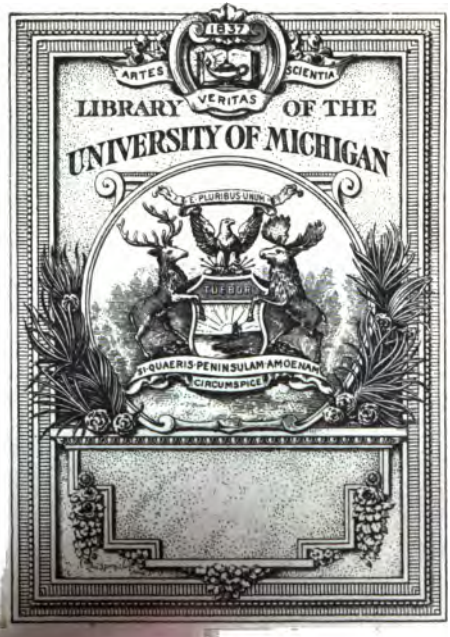
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TRANSACTIONS

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OF THE

XXXVTH ANNUAL MEETING

OF THE

OHIO STATE MEDICAL SOCIETY,

HELD AT CLEVELAND,

June 15th, 16th and 17th, 1880.

COLUMBUS, OHIO:
COTT & HANN, JOB AND BOOK PRINTERS.
1880.

Officers for 1880–81.

PRESIDENT,

E. H. HYATT, ... Delaware.

VICE PRESIDENTS,

CYRUS FALCONER, ... Hamilton.
J. C. HUBBARD, ... Ashtabula.
H. J. DONAHOE, ... Sandusky.
R. L. SWENEY, ... Marion.

SECRETARY,

J. F. BALDWIN, ... Columbus.

ASSISTANT SECRETARY,

C. A. KIRKLEY, ... Toledo.

TREASURER AND LIBRARIAN,

T. W. JONES, ... Columbus.

COMMITTEE ON ADMISSIONS,

H. S. GREENE, ... Covington.
S. W. FOWLER, ... Delaware.
E. M. WEBSTER, ... Kingsview.
D. C. WILSON, ... Ironton.
E. B. PRATT, ... Mt. Sterling.

THIRTY-FIFTH ANNUAL MEETING

OF THE

Ohio State Medical Society,

HELD AT

CLEVELAND, JUNE 15TH, 16TH, AND 17TH, 1880.

FIRST DAY.

The Ohio State Medical Society met in its thirty-fifth annual session, at Cleveland, in the Opera House, Tuesday, June 15th, 1880, at 2 o'clock P. M.

The Society was called to order by its retiring President, B. B. Leonard, of West Liberty.

Prayer was offered by Rev. Dr. Rosius, of Cleveland.

The President elect was then introduced, the retiring President giving a brief biographic sketch of the incoming officer.

President J. A. Murphy took the chair, and introduced to the audience His Honor Mayor Herrick, who delivered an interesting address, highly pertinent to the occasion.

MAYOR'S WELCOMING ADDRESS.

GENTLEMEN: You and I are dealing with matters largely experimental. I am experimenting in attempting to say something on a subject that, practically, I know nothing about, and in endeavoring to make a speech that may be appropriate to the occasion. A failure on my part, however, can work no mischief, except to myself; but a failure on your part—who is ever to find it out?

Frederick II., in the 13th century, laid down a rule and required an oath of all who practiced medicine, to be pure in life, submissive to the laws, to attend the poor gratuitously, and not to share the profits of the apothecary. I presume you all have adopted the same rule, and strictly comply with it in your practice.

The object of this convention, as I understand it, is for the purpose of comparing individual experience with a view to mutual benefit. There can be no advancement in your science, and your profession would come to a standstill, without the trial of many experiments. It is said that when the most accomplished and celebrated physician of the eighteenth century died, he left behind him an elegant volume, the title of which declared that it contained all the secrets of medicine. On opening the volume, every page except one, was blank. On that page was written, "Keep the head cool, the feet warm, and the bowels open." This legacy typified not unaptly or unjustly the acquirements of medical art at the close of the eighteenth century. Whether there has been a development in the science of medicine during the last century equal to that in other sciences, you, of course, know better than I or any other who is not familiar with its growth. It stands in a peculiar situation, for while it is the most important of all sciences, it is the one about which the outside world can form the least definite judgment as to its material and substantial development. Although the proposition has been asserted that "the proper study of mankind is man," yet I venture to say, that it is a subject about which the great mass of mankind know less than of any other that can be mentioned, and possibly care less. That great philosopher, Socrates, long since nailed over the door of his lodge and recommended unto man as his highest duty, to "know thyself." Yet how few of the succeeding generations have sought to perform that duty. To the medical fraternity chiefly, if not alone, has been left this field of investigation, and on them has been imposed the duty not only of knowing themselves, but everybody else. Mankind give but little thought to themselves, until by the violation of some law of their being they become ill, and then, instead of questioning themselves as to the cause or proper steps for recovery, they consult the Doctor, and ask him what is the matter.

We know that in the past hundred years the march of science has been one of extraordinary rapidity; that during this period more of Nature's great resources have been discovered, and more of her secrets found out, than ever before. We believe with all these changes and progress, medicine and surgery have kept abreast of the other sciences, and have made equal conquests over authority, error and tradition. We are pleased to be assured that, however obscure they may appear to the superficial observer, medical science and the medical profession are working out great changes in the social condition of mankind, and not the less powerfully because silently and imperceptibly. Notwithstanding, however, the great development made in the science and art of medicine, still it appears that the chief, or at least one of the chief, problems for solution by the fraternity at this day is just how far to trust nature in the readjustment or restoration of the disordered or diseased parts or functions of the human body. I take it that these questions are not yet settled, but must still be the subject of deep inquiry and investigation.

However great the mistake of Galen in the second century may have been, when he made the announcement that the soul was composed of three parts—a vegetative, residing in the liver, an irascible, in the heart, and a rational, having its seat in the brain—and notwithstanding his theory was accepted and believed by the learned men for over three centuries, no serious damage could result therefrom, for the Doctor of Divinity who prescribes for the soul may himself be mistaken, and yet the soul be saved.

No person stands in so responsible a relationship to his fellow men as the physician. He often holds the scales which weigh the chances of illness and health, of life and death. There should be no self-delusion, no yielding to the importunities of patients, or wavering from that course which careful study and profound investigation have marked out. You are here to-day as students of human nature, and as men who apply the science of human nature to the wants of mankind. You are practitioners of legitimate medicine, which is said to be catholic and eclectic, which has neither exclusive dogmas nor creeds, which requires its members to seek knowledge from every available source and apply it in every available mode, as may be demanded

by your circumstances or those of your patient; the object of the exercise of the art being the relief of the patient as promptly, safely, and as pleasantly as possible, without any formal restrictions as to means or modes. You are here to-day to melt the gold out of the past, though its dross should fly in dust to all the winds of heaven, to save all your old treasures of knowledge, and mine deeply for new, to cultivate that mutual respect of which outward courtesy is the sign, to work together, to take counsel together for the truth.

In behalf of the City of Cleveland, I bid you welcome to our city, and express the hope that you may reap a rich harvest of knowledge and pleasure as the result of this your annual State Convention.

Dr. E. D. Burton, delivered the address of welcome, on behalf of the Cuyahoga County Medical Society.

The Report of the Executive Committee, was made by Dr. H. J. Herrick, and was followed by that of the Secretary; both of which were received.

AMENDMENTS.

The amendments to the Constitution and By-laws, presented by Drs. Howard and Baldwin, respectively, at the last meeting, were then adopted.

Dr. M. L. Mead, of Cleveland, offered the following amendment to the Constitution:

Candidates for membership in the Society must be members in good standing in some County Society of this State, and must present a certificate of the same from the officers of said Society.

The report of the Committee on Publication was read and received.

REPORT OF PUBLICATION COMMITTEE.

COLUMBUS, OHIO, June 13, 1879.

The Publication Committee met at the office of the chairman, all the members being present.

Bids had been made on a basis of 450 copies of 200 pa-

ges; paper, 50 lb. Eastern Book, 25x38, sized and extra-calendered; binding, same as last year.

The following bids were opened and read:

Columbus Printing Works,	$247.50.
Croy, McFarland & Co., Dayton,	220.00.
Gazette Printing House,	220.50.
Cott & Hann,	210.00.

On motion of Dr. J. B. Thompson, the bid of Cott & Hann, was accepted.

On motion of the same, Dr. J. F. Baldwin was elected editor. Adjourned.

J. F. BALDWIN, *Chairman.*

The Chairman—Dr. J. A. Murphy—made a verbal report from the Committee appointed to memorialize the Legislature.

DR. POOLEY'S PAPER.

The report on Syphilis, by Dr. Pooley, being next in order, the Secretary stated that Dr. Pooley would not be able to attend the meeting, but that he had requested that the Society allow him to present his paper, which would be finished in a few days, to the Committee on Publication, for insertion in the Transactions. Dr. H. J. Herrick moved that the request be granted. This motion was opposed by several members, as tending to establish a bad precedent, and on vote was lost.

Dr. C. E. Beardsley read a paper on

GELSEMIUM SEMPERVIRENS.

Dr. H. J Herrick presented the affected portion of bowel, from a fatal case of

INTUSSUSCEPTION,

in a child, which had been obtained at an necropsy that morning.

Society adjourned.

SECOND DAY.

MORNING SESSION.

Society was called to order by the President. Minutes were read and approved.

Committees were filled as follows, by the President:

Committee on Admissions—E. W. Howard, W. H. Philips, Dudley Allen, G. W. Boerstler, H. J. Donahoe.

Committee on Finance.—J. M. Southard, E. B. Harrison, Joel Pomerine, C. E. Beardsley, J. W. Hamilton.

Judicial Council.—W. J. Scott, E. W. Howard, J. W. Hamilton, H. J. Donahoe, Wm. M. Beach.

Committee on Medical Societies.—W. J. Scott, Jonathan Morris, B. B. Leonard, C. A. Kirkley, W. C. Chapman.

The report of Committee on Obituaries was read by Dr. Isaac Kay.

DR. BERNARD TAUBER

Read a paper on Idiopathic Chronic Catarrhal Laryngitis.

DR. HENRY G. CORNWELL

Read a paper on the Treatment of Blepharospasm by Stretching the Orbicularis Palpebrarum.

A COMPLETE SET OF TRANSACTIONS.

Dr. Wm. M. Beach moved that the Secretary be authorized, and requested to procure a full set of Reports of the Annual Proceedings of this Society, to be presented to the Ohio State Library; and that he be authorized to draw upon the Treasurer of this Society for the expenses incurred in the purchase. Carried.

CONSTITUTION AND BY-LAWS.

Dr. H. J. Donahoe moved that a committee of three be appointed, whose duty it shall be to collate the various amendments to the Constitution and By-Laws of this Society, as well as the resolutions in force, together with such

changes or additions as they may suggest, and report the same to this Society at its next meeting for adoption.

Carried.

REPORT OF TREASURER AND LIBRARIAN.

COLUMBUS, O., June 14, 1880.

As Treasurer, I report as follows:

Balance on hand June 3, 1879,	$444 95
Initiation Fees and Dues to date,	656 00
From sales of copies of *Transactions*,	11 00
Total,	$1111 95
Amount disbursed as per cash book,	549 03
Cash now on hand,	$562 92

As Librarian, I report that, in addition to numerous volumes of *Transactions* of the American Medical Association, and of other State Societies, not to mention many pamphlets, circulars, journals, &c., there are now in the Library a large number of volumes of our own *Transactions*, as follows:

1856	10 copies.
1857	111 "
1859	37 "
1860	66 "
1862	2 "
1867	29 "
1868	20 "
1869	17 "
1870	90 "
1871	122 "
1872	82 "
1873	45 "
1874	49 "
1875	37 "
1876	119 "
1877	161 "
1878	178 "
1879	80 "
Total	1255 "

Respectfully submitted.

T. W. JONES, *Treasurer and Librarian.*

FINANCE COMMITTEE.

This Committee made its report, which was, on motion, accepted and adopted;

We recommend that the Treasurer receive one hundred dollars for his services for the past and ensuing year.

That we pay to the editor of the Transactions seventy-five dollars.

That we pay to the Secretary fifty dollars.

That the account of the Secretary for $6.19, for stationery, stamps, &c., be allowed.

That the annual assessment be one dollar.

THE PRESIDENT'S ADDRESS

Was then read, and, on motion of Dr. E. H. Hyatt, was referred to a special committee of three members, with instructions to report to the Society what action was necessary in order to dispose of the address to the best advantage. This Committee consisted of Drs. E. H. Hyatt, B. B. Leonard and H. J. Herrick.

ELECTION OF OFFICERS

Was next in order, and resulted as follows:

E. H. Hyatt, Delaware, *President.*

Cyrus Falconer, Hamilton,
J. C. Hubbard, Ashtabula,
H. J. Donahoe, Sandusky,
R. L. Sweney, Marion,
} *Vice Presidents.*

J. F. Baldwin, Columbus, *Secretary.*

C. A. Kirkley, Toledo, *Asst. Secretary.*

T. W. Jones, Columbus, *Treasurer and Librarian.*

H. S. Greene, Covington,
S. W. Fowler, Delaware,
E. M. Webster, Kingsview,
D. C. Wilson, Ironton,
E. B. Pratt, Mt. Sterling,
} *Committee on Admissions.*

Society adjourned.

THIRD DAY.

MORNING SESSION.

Society called to order by Vice President, John Davis.

Minutes read and approved.

The Committee appointed to consider the address of the President, reported as follows:

REPORT ON PRESIDENT'S ADDRESS.

Your Committee, to whom was referred the President's address, after due deliberation, recommend that the Committee appointed last year to memorialize the Legislature in regard to the establishment of a State Board of Health, being in the judgment of your committee much too large, be discharged, and a committee of seven be appointed instead, consisting of Drs. John A. Murphy, Cincinnati; Wm. M. Beach, London; H. J. Herrick, Cleveland; J. W. Hamilton, Columbus; John A. Wilkins, Delta; J. L. Mounts, Morrow.

That said Committee shall

1st.—Supervise and, so far as possible, direct such legislation as shall secure the establishment of a State Board of Health.

2d.—Ascertain, if possible, what measures can be adopted by the State to *prevent* the prevalence of insanity, and to improve the present methods of management and treatment of the inmates of our asylums.

3d.—Secure such legislation as shall regulate the practice of medicine, in such a way that each practitioner shall be required to furnish satisfactory evidence of qualification.

Your Committee offer for your consideration and approval, the following preamble and resolutions:

Whereas, it is manifest to every thinking medical man, that there is a growing prevalence of insanity in the State, and, under the present *regime* in our asylums for the insane, the percentage of recoveries so small as to excite comment; therefore

Resolved, 1st, that the present system of erecting large asylums, where many hundreds of patients are necessarily

thrown together, rendering proper sanitary regulations impossible; the present methods of *restraint and idleness*, and the absence or want of more special treatment for individual cases, should be not only discouraged but condemned.

2d.—That the selection of young and inexperienced persons, without special qualification, to manage and treat the insane, is unworthy the State, and may be attended with serious consequences to these unfortunates.

3d.—That every effort should be made by the profession at large, to remove all our benevolent institutions beyond the reach and control of political parties.

E. H. HYATT.
H. J. HERRICK.
B. B. LEONARD.

DIPSOMANIA.

Dr. A. Dunlap offered the following resolution, which was laid on the table for one year:

Resolved, That the State Medical Society found an institution for the treatment of dipsomania. That for the purpose of raising the necessary fund each member of the society be appointed a Committee in his own locality to solicit subscriptions, said subscriptions to be binding only when the sum of $——— is pledged. That the institution be governed by five trustees, to be appointed by the society, to whom the soliciting committees shall report the subscriptions obtained and who are hereby instructed to form themselves into a body corporate, if necessary. That as soon as aid is given by the State, the State shall be allowed two trustees by the society.

The President elect was then introduced to the Society, and responded briefly.

DR. H. J. HERRICK

Read a paper on Subinvolution of the Uterus.

DR. W. J. SCOTT

Made his report on the Drinking Waters of the Cities of Ohio.

AFTERNOON SESSION.

Society called to order by Vice President Davis.

Dr. J. W. Hamilton presented a number of specimens, including uterine polyps, hydatid tumor of peritoneum, etc., giving the history of each.

The papers of Drs. Hurd, Franklin and Loving, were ordered read by title, as the time was too short for them to be read at length.

Dr. Wm. M. Beach offered the following resolution, which was adopted:

VOTE OF THANKS.

Resolved, That the especial thanks of this Society are hereby tendered to our retiring President, Dr. John A. Murphy, for the dignity, impartiality and efficiency with which he has presided over our deliberations.

Also, to Dr. J. F. Baldwin, our efficient Secretary.

Also, to the local Executive Committee, and the Profession of Cuyahoga County, for the cordiality with which we have been received, and the elegance with which we have been entertained.

Dr. John Bennitt offered the following resolution:

Resolved, That this Society appoint a committee of five, who shall be charged with the duty of urging upon the Legislature of this State the necessity of some enactments that shall furnish a visible line of demarcation between legitimate practitioners of medicine, and those practicing without authority of law, or any real qualification, as in the Province of Ontario, Canada, so far as the nature of our institutions will allow.

Carried.

The Chair appointed, as members of this committee, Drs. John Bennitt, W. J. Scott, A. Dunlap, B. B. Leonard and A. Andrus.

Dr. J. C. Preston offered a resolution that the Committee on Obituaries be requested to revise the published list of deceased members, and, where possible to obtain the facts, to fill the blanks with dates of death. Carried.

CONSOLIDATED REPORT OF COMMITTEE ON ADMISSIONS.

During the session, the following persons were proposed for membership, and, on vote, elected.:

NAME.	RESIDENCE.	VOUCHERS.
A. G. Leland	Trumbull	W. J. Scott, E. L. King.
M. J Jenkins	Plain City	Wm. M. Beach, J. A. Murphy.
R. P. Hays	Vienna	H. G. Cornwell, M. S. Clark.
Chas. Hoover	Ross	C. Falconer, A. Dunlap.
J. S. Wood	Collinswood	X. C. Scott, J. Bennitt.
J. A. Hobson	Flushing	J. A. Murphy, J. F. Baldwin.
G. M. Proctor	Shalersville	A. W. Alcorn, E. W. Howard.
A. D. Burton	Collamer	I. N. Himes, Chas. C. Arms.
T. H. Phillips	Canton	T. McEbright, E. V. Kendig.
A. C. Brant	"	" "
H. K. Spooner	Republic	H. J. Herrick, J. F. Baldwin.
Frank H. Todd	Painsville	F. C. McConnelly, Proctor Thayer.
Bernard Krause	Cleveland	J. C. Preston, I. N. Himes.
S. St. J. Wright	Tallmadge	I. N. Himes, J. C. Preston.
Homer Johnson	Oberlin	Jno. Bennitt, I. N. Himes.
Lewis Buffett	Cleveland	" "
A. F. House	"	" "
E. S. Russell	Tuscarawas	A. L. Osborn, Hiram Eckman.
W. B. Rezner	Cleveland	Jno. Bennitt, I. N. Himes.
H. J. Lee	"	" " "
Clark Townsend	"	" " "
B. A. Rabe	"	" " "
J. B. McGee	"	" " "
Proctor Thayer	"	" " "
L. Carrie Jones	Kinsman	C. S. Ward, H. G. Cornwell.
Allen Jones	Kinsman	" " "
M. L. Williams	Vienna	" " "
J. H. Smith	Mecca	" " "
F. P. Moore	New Lisbon	" " "
W. A. Ward	Conneaut	E. M. Webster, Jno. Bennitt.
A. D. Warner	Fullertown	Orange Pomeroy, J. Davis.
Geo. A. Callamore	Toledo	W. C. Chapman, C. A. Kirkley.
Guy Hutchins	Toledo	" " "
F. H. Geer	Rock Creek	Dudley Allen, J. F. Baldwin.
J. M. Gillespie	Bloomingsburg	E. H. Hyatt, J. F. Baldwin.
Sara J. Warren	Cleveland	A. C. Miller, J. Pomerene.
F. W. Schwan	Poplar	J. A. McFarland, H. K. Spooner.
W. H. Humiston	Cleveland	G. O. Butler, J. H. Lowman.
John Perrier	"	W. B. Perrier, H. J. Herrick.
Chas. R. Fowler	Lima	John H. Lowman, S. B. Hiner.
J. E. Darby	Cleveland	W. B. Rezner, Chas C. Arms.
J. T. Cushing	Huron	H. J. Donahoe, H. J. Herrick.
Annie K. Scott	Cleveland	J. C. Preston, John Bennitt.

NAME.	RESIDENCE.	VOUCHERS.
Chas. C. Arms	Cleveland	J. C. Preston, John Bennitt.
E. L. King	Ashtabula	W. J. Scott, F. J. Weed.
J. E. Newman	Gilboa	C. E. Beardsley, E. W. Howard.
M. Rosenwasser	Cleveland	J. H. Lowman, F. J. Weed.
Guy B. Case	"	F. J. Weed, W. J. Scott.
T. A. Weed	"	F. J. Weed, W. J. Scott.
C. F. Dutton	"	M. L. Mead, Jno. Bennitt.
Robt. H. Rice	Fremont	W. C. Chapman, C. A. Kirkley.
Chas. L. Morgan	Westfield	H. S. Green, J. A. Mouser.
J. B. Ballinger	Versailles	M. S. Clark, H. G. Cornwell.
A. B. Storch	Milan	A. L. Osborn, W. J. Scott.
E. E. Beeman	Wakeman	" " "
O. Prentice	Monroeville	" " "
A. B. Beech	Seville	A. B. Miller, J. Pomerene.
P. G. Lenhart	Wauseon	" " "
Wm. H. Cretcher	Bellefontaine	B. B. Leonard, E. H. Hyatt.
S. Robinson	Pettysville	W. C. Chapman, C. A. Kirkley.

JUDICIAL COUNCIL'S REPORT.

The Council reported, recommending Columbus as the next place of meeting, and the time the second Tuesday in June, 1881.

Also, recommending the expulsion of Asa Wangaman, of Tiffin, from the Society for unprofessional conduct.

Report adopted.

REPORT OF COMMITTEE ON MEDICAL SOCIETIES.

The following Auxiliary Societies are present by duly authorized delegates:

Seneca County Medical Society—H. K. Spooner.

Ross County Medical Society—Joseph M. Gillespie.

Morrow County Medical Society—C. L. Morgan.

Belmont County Medical Society—J. A. Hobson.

Logan County Medical Society—Wm. H. Cretcher, C. P. Kenedy.

Delamater Medical Society, Norwalk—O. Prentiss, A. B. Storch.

Cincinnati Academy of Medicine—Bernard Tauber, J. C. Culbertson.

Cuyahoga County Medical Society—H. H. Powell, C. C. Arms, C. F. Dutton, P. H. Sawyer, W. O. Jenks, M. L. Mead.

Butler County Medical Society—C. C. Hover, H. C. Hover, C. Falconer.

Erie County Medical Society—E. Stanley.

Ashtabula County Medical Society—F. W. Geer, L. L. Burrows, W. M. Eames.

Stark County Medical Society—T. H. Phillips, A. Brant.

Clark County Medical Society—J. H. Rodgers.

Delaware County Medical Society—S. W. Fowler, Wm. McIntire.

Northwestern Medical Association—Geo. A. Collamore, L. Robinson, W. Phillips.

Summit County Medical Society—L. F. O'Dell.

Portage County Medical Society—George M. Proctor, B. B. Loughead.

Seneca County Medical Society—F. W. Schwan.

Trumbull County Medical Society—R. P. Hays, Allen Jones, T. H. Smith, W. L. Williams.

Meigs County Medical Society—N. B. Toby, C. K. Reed.

North Eastern Medical Society—J. E. Daugherty.

Central Ohio Medical Society—J. F. Baldwin.

Marion County Medical Society—J. A. Mouser, C. L. Morgan.

Highland County Medical Society—B. F. Granger, C. A. Stewart.

Fulton County Medical Society—N. W. Jewel.

Tuscarawas County Medical Society—Robert Seldon.

The following Societies desire to become auxiliary, and we recommend their election:

Sandusky County Medical Society.

Bay City Medical Society.

The Union Medical Society of Columbiana and adjoining counties, also desires to become auxiliary, but as the necessary papers are not presented, the request cannot be complied with.

The Butler County Medical Society, which withdrew in 1868, was afterward reinstated, although no record appears of the fact, and its delegates are therefore entitled to seats.

Report adopted.

COMMITTEES.—STANDING AND SPECIAL.

Executive Committee.

C. B. Ferrell, Columbus, J. B. Thompson, Columbus,
Starling Loving, Columbus, J. W. Hamilton, Columbus,
Norman Gay, Columbus.

Committee on Publication.

J. F. Baldwin, Columbus, H. G. Landis, Columbus,
H. Hendrixon, Columbus, Geo. T. Stein, Columbus,
P. M. Wagenhals, Columbus.

Judicial Council.

W. J. Scott, Cleveland, John Davis, Dayton,
W. T. Ridenour, Toledo, Wm. H. Mussey, Cincinnati,
H. J. Donahoe, Sandusky.

Committee on Finance.

D. Halderman, Columbus, A. Hurd, Findlay,
D. D. Bramble, Cincinnati, C. E. Beardsley, Ottawa,
E. W. Howard, Akron.

Committee on Medical Societies.

E. Pearce, Jr., Steubenville, T. C. Hoover, Columbus,
Joel Pomerine, Millersburg, W. S. Constant, Delaware,
S. S. Thorn, Toledo.

Committee on Codification and Revision of Constitution.

J. F. Baldwin, Columbus, J. B. Thompson, Columbus,
T. W. Jones, Columbus.

Committee on Obituaries.

Isaac Kay, Springfield, W. C. Chapman, Toledo,
Jonathan Morris, Ironton.

Committee to Memorialize the Legislature.

J. A. Murphy, Cincinnati, Wm. M. Beach, London,
H. J. Herrick, Cleveland, J. W. Hamilton, Columbus,
John A. Wilkins, Delta, J. L. Mounts, Morrow.

Committee on Medical Law.

John Bennitt, Cleveland, W. J. Scott, Cleveland,
A. Dunlap, Springfield, B. B. Leonard, West Liberty,
A. Andrus, Westerville.

Committees on Special Subjects.

R. L. Sweney, Marion, Anesthetics.

John Bennitt, Cleveland, Relation of climate to various forms of Consumption.

L. Firestone, Columbus, Prevention and cure of Insanity.

J. W. Hamilton, Surgery.

W. W. Dawson, Cincinnati, Progress of Surgery.

S. Loving, Columbus, Etiology of Diseases of Mississippi Valley.

A. C. Miller, Cleveland, Endo-Metritis.

D. J. Snyder, Scio, Eucalyptus Globulus,

S. C. Ayres, Cincinnati, Progress of Ophthalmology and Otology.

M. C. Cuykendall, Bucyrus, Progress of Gynecology.

Wm. H. Mussey, Cincinnati, Best method of Treating Fractures.

A. Dunlap, Springfield, Ovarian Disease.

H. J. Herrick, Cleveland, Surgical injuries of the head, with results of Treatment.

J. T. Whittaker, Cincinnati, Laryngeal Phthisis.

W. B. Davis, Cincinnati, Progress of Therapeutics.

J. H. Lowman, Cleveland, New Remedies.

H. C. Pearce, Urbana, Progress of the Obstetric art.

B. B. Leonard, West Liberty, Lithotomy.

W. J. Scott, Cleveland, Impulsive Insanity.

W. C. Chapman, Toledo, Present Status of Therapeutical Inquiry,

Theo. A. Weed, Cleveland, Phthisis—Its varieties and Pathology.

J. C. Kennedy, Batavia, Insanity.

John A. Murphy, Cincinnati, Origin, Specificity and Pathology of Typhoid Fever.

D. H. Brinkerhoff, Fremont, Exanthemata.

Wm. Carson, Cincinnati, Epidemic and Sporadic Dysentery.

R. M. Denig, Columbus, Cholera Infantum.

H. Culbertson, Zanesville, Diphtheria.

D. N. Kinsman, Columbus, Sanitary Science.

DELEGATES TO STATE MEDICAL SOCIETIES.

Kentucky,—E. Williams, Cincinnati; W. R. Woodward, Cincinnati; J. C. Reeve, Dayton.

Indiana.—B. B. Leonard, West Liberty; J. W. Bond, Toledo; W. R. Bricker, Shelby.

Michigan.—D. H. Brinkerhoff, Fremont; Calvin H. Reed, Toledo; S. B. Hiner, Lima.

West Virginia.—J. P. Bing, Portsmouth; J. W. Hamilton, Columbus; M. W. Junkens, Bellaire.

Pennsylvania.—J. W. Underhill, Cincinnati; L. M. Whiting, Canton; J. C. Hubbard, Ashtabula.

New York.—P. S. Conner, Cincinnati; R. M. Denig, Columbus; J. N. Burr, Mt. Vernon.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION.

John Bennitt, Cleveland; X. C. Scott, Cleveland, W. J. Scott, Cleveland; H. J. Herrick, Cleveland; A. H. Agard, Sandusky; H. J. Donahoe, Sandusky; W. W. Jones, Toledo; Geo. A. Collamore, Toledo; S. F. Forbes,

Toledo; W. T. Ridenour, Toledo; John Davis, Dayton; J. C. Reeve, Dayton; J. M. Weaver, Dayton; W. W. Dawson, Cincinnati; J. A. Murphy, Cincinnati; Wm. Carson, Cincinnati; P. S. Conner, Cincinnati; John Davis, Cincinnati; C. S. Muscroft, Cincinnati; L. Firestone, Columbus; J. W. Hamilton, Columbus; H. G. Landis, Columbus; D. N. Kinsman, Columbus; S. Loving, Columbus; Geo. Mitchell, Mansfield; S. S. Scovill, Lebanon; J. D. Robinson, Wooster; A. W. Ridenour, Massillon; G. W. Pullen, Logan; J. W. Russell, Mt. Vernon; J. W. McMillen, Mt. Vernon; J. O. McFarland, Tiffin; E. W. Howard, Akron; T. Jones, London; C. C. Hildreth, Zanesville; B. F. Hart, Marietta; Cyrus Falconer, Hamilton; Alfred Follett, Granville; Orange Pomeroy, Chardon; Wm. N. Yost, Mt. Blanchard; F. C. McConnelly, Vermillion; H. Culbertson, Zanesville; G. W. Boerstler, Lancaster; S. P. Bishop, Delta; J. N. Beach, West Jefferson; W. S. Battles, Shreve; A. C. McLaughlin, Tremont City; Isaac Kay, Springfield; J. U. Riggs, Bryan; J. M. Shoemaker, Napoleon; J. M. Southard, Marysville.

Society adjourned, to meet in Columbus, June 14, 1881, at 2 P. M.

J. F. BALDWIN, *Secretary.*

C. A. KIRKLEY, *Assistant Secretary.*

E. H. HYATT, *President.*

LIST OF AUXILIARY SOCIETIES,

WITH DATE OF ADMISSION.

Academy of Medicine of Cincinnati 1875
Allen County Medical Society 1867
Ashland County Medical Society 1865
Ashtabula County Medical Society 1878
Athens County Medical Society 1866
Athens, Morgan and Washington Medical Ass'n . . 1855
Bay City Medical Society 1880
Belmont County Medical Society 1851
Brown County Academy of Medicine 1877
Brown County Medical Society 1877
Butler County Medical Society 1852
Central Ohio Medical Society 1869
Champaign County Medical Society 1853–1879
Cincinnati Medical Society 1875
Clarke County Medical Society 1849–1852–1877
Clermont Medical Association 1854
Cleveland Academy of Medicine 1870
Clinton County Medical Society 1879
Columbus Academy of Medicine 1879
Columbus Pathological Society 1877
Cuyahoga County Medical Society 1879
Darke County Medical Society 1879
Delamater Med. Ass'n of Norwalk and Vicinity 1859-1870
Delaware County Medical Society 1869
Delaware Medical Society 1854–1875
Delaware Medical Institute 1872
Drake Medical Society 1854
Erie County Medical Society 1850–1877
Franklin County Medical Society 1879
Fulton County Medical Society 1870
Greene County Medical Society 1856
Hamilton County Medical Society 1849–1852
Hardin County Medical Society 1866
Highland County Medical Society 1877
Hocking Valley Medical Society 1879

Holmes County Medical Society 1869
Jefferson County Medical Society 1859
Knox County Medical Society 1863
Lancaster Medical Institute 1849
Lawrence County Medical Society 1877
Licking County Medical Society 1879
Lebanon Medical Society 1849
Logan County Medical Society 1875–1877
Mahoning County Medical Society 1879
Marion County Medical Society 1879
Miami Valley Medical Society 1879
Medico-Chirurgical Society of N. E. Ohio 1876
Medina County Medical Lyceum 1858
Medical Ass. of Adams, Brown and Clermont Cos. . 1850
Meigs County Medical Association 1850
Miami County Medico-Chirurgical Society 1851
Montgomery County Medical Society 1851
Morrow County Medical Society 1878
North-Eastern Ohio Medical Association 1870
North-Western Ohio Medical Association 1869
Pickaway County Medical Society 1856–1878
Portage County Medical Society 1869
Preble County Medical Society 1849
Putnam Medical Society 1877
Richland County Medical and Surgical Society . . . 1850
Ross County Medical Society 1876
Sandusky County Medical Society 1880
Scioto County Medical Society 1868
Seneca County Medical Society 1854–1879
Shelby County Medical Society 1852
Stark County Medical Society 1850–1852
Stillwater Medical Society 1873
Summit County Medical Society 1866
Toledo Medical Association 1857
Trumbull County Medical Society 1868
Tuscarawas County Medical Society 1851
Union Medical Association 1879
Union Medical Society of Alliance 1864
Wayne County Medical Association 1850
Wood County Medical Society 1877
Zanesville Academy of Medicine 1879

BIOGRAPHICAL SKETCH OF JOHN A. MURPHY.

PRESIDENT OHIO STATE MEDICAL SOCIETY.

John A. Murphy, M. D., was born in Tennessee, June 23, 1825, and was educated in the Cincinnati College. He studied medicine with John P. Harrison, who was then one of the professors in the Medical College of Ohio, and graduated from that institution in March, 1846. He was then elected Resident Physician to the Commercial Hospital, and served in that capacity for one year. Having practiced his profession for five years in Cincinnati, he relinquished his practice, crossed the ocean, and spent two years in study in the hospitals of Europe. In 1852 he was elected Professor of Materia Medica in the Miami Medical College, which had been organized in that year. On the coalition of the Miami Medical College and the Medical College of Ohio, he was elected to the same chair. On the reorganization of the Miami Medical College in 1866, he was elected Professor of the Principles and Practice of Medicine—the chair he now holds in that college. He has been one of the medical staff of the Cincinnati Hospital for eighteen years. He was one of the editors of the *Medical Observer* until it consolidated with the *Western Lancet*, and continued as an editor of the *Lancet and Observer* for some years. He is a member of the Cincinnati Medical Society, and of the American Medical Association. He became a member of the Ohio State Medical Society in 1872, and was elected its President in 1879. During the War of the Rebellion he was appointed by Governor Todd as an examining surgeon of those to be commissioned as surgeons of Ohio regiments, and performed the duties imposed with honor to himself and great service to the State

OHIO STATE MEDICAL SOCIETY.

At the Seventeenth Annual Session of the Ohio State Medical Society the following resolution was adopted:

Resolved, That the publication of any address, prize essay, or other paper by this Society is no evidence of its endorsement of the sentiments therein contained.

"D."

PLAN FOR THE FORMATION OF AUXILIARY SOCIETIES.

"Associations desiring to become auxiliary, must furnish to the Committee on Medical Societies, a copy of their constitution and by-laws, and a list of the names of their members.

"The committee will report thereon, a majority vote of the Society admitting as members the President and Secretary, *ex-officio,* together with one delegate for every ten members the proposed auxiliary society may consist of.

"Delegates will present to the State Medical Society, such papers, &c., &c., as the association they represent may select, copies of which they will deposit with the Committee on Publication.

"In questions of a general nature affecting the profession of the state, should the yeas and nays be demanded, the delegates, on producing the individual authority of each, may vote by proxy for absent members of the State Medical Society, who are also members of the same association with the delegates.

"Auxiliary Societies will, so far as possible, contribute to the furtherance of the objects of the State Medical Society, by selecting from their own archives such original papers, essays, reports, and especially statistics, as they may deem of sufficient value, on every subject connected with medical science."

From *Transactions* of 1850.

ADDRESS OF WELCOME

BY

E. D. BURTON, M. D.,

CLEVELAND.

ADDRESS OF WELCOME,

BY

E. D. BURTON, M. D., CLEVELAND.

By the partiality of your Executive Committee, and in behalf of the Cuyahoga County Medical Society, it is my pleasure to speak to you words of joyful welcome. The pleasurable circumstances connected with the annual meetings of representative men of the medical profession of this State, render my duties extremely gratifying.

At this time of the year, when art vies with nature to please and satisfy, your visit to this beautiful city will be hallowed in memory.

No congratulatory words are necessary to those veterans of this association who have for years met in annual council, and in an organized body with good cheer labored to elevate our profession and increase the facilities for relieving the ills that flesh is heir to. Their enjoyment is in contemplating the growth and success of this harmonious body, in bringing the profession as one mind to promote the general good. I congratulate the younger members of this society, and those present who desire connection, that they are in the midst of the Nestors of the profession, and can learn of their vast experience the practical lessons of wisdom that a long life of arduous duties discloses.

Permit me at this time to thank the pioneer men of this society, for their labors in founding and perpetuating this organized harmonious brotherhood of medical men, and erecting a standard of medical excellence that all true ethical auxiliary societies will sustain. I cannot too strongly emphasize the fact, that the steady growth and enlightenment of our profession, and all important discoveries in medicine or surgery, have been the results of medical or-

ganization encouraging thought and discussion, either oral or written, upon questions of great interest to the profession. That higher and better attainments follow those who are active, earnest, working members of local medical societies, is within the observation of all, and the young medical aspirant for renown and success must seek it in the company of fraternizing enthusiasm, that is begotten in the discussion of the various branches of medicine in county, village and state organizations.

It requires much more study and research to keep pace with the progress of the age in all departments of science now than formerly, particularly in medicine; and I can say in truth, that the younger members of our societies are alive to the fact of the public demand, and by their originality of thought and persevering industry and courage in investigation with the scalpel and microscope and all modern resources, are making discoveries tending to most valuable acquisitions for future usefulness. We greet such young men as worthy custodians of the labors of the past age, and welcome them to new fields of investigation that preventive medicine and sanitary science are opening to their view. We have some such, I am proud to say, as members of the Cuyahoga County Society, and I invite you to make their general acquaintance to confirm my opinion. But we ought to increase their number from the great number with which our medical colleges are flooding the country—a hazard that I hope our medical institutions will cease to take. It is not numbers that the public good requires, but quality. It is a duty we owe ourselves and the public, that we should discourage this hatching of weak and unfit doctors. We want men that will make ignorance and charlatanism odious by contrast, and manifest to the world that devotion and highest honors and worth are truly to be found in the regular profession. I am aware that our conscientious medical instructors endeavor to be, and are becoming, more thorough and efficient in teaching the science of medicine, and that our medical institutions are enlarging and perfecting their curriculums of study and more satisfactorily meeting the demands of the profession, and we are obligated to send them more thoroughly educated students, and young men who will be loyal to our profession. I trust a spirit of reform which is

abroad in this land in reference to the granting of diplomas to unworthy men, will receive your consideration. In behalf of the honorable profession of this State which you in this society represent, we beg of you to condemn the practice of our universities and colleges graduating those whom they know by good evidence intend to practice homeopathy. The diploma is granted upon certain expressed conditions to those who have acquired a competent amount of knowledge, and who acknowledge those principles of practice which our medical schools believe to be correct. Yet these cardinal principles of our profession are immediately decried and renounced, and charlatanism of the worst form promulgated. Is not such dissimulation incompatible with that sincerity and honesty of purpose which constitute an essential ingredient in the medical character? With shame and dishonor written all over their faces, they go forth to practice medicine with their passport of accomplishment granted by some regular school of medicine, compromising a most honorable profession by a degrading quackery, claiming to practice all methods of cure, proclaiming their willingness to surrender their own judgment and conscientious opinion to the caprice and fancy of any that may consult them. No man without a compromise of character can adopt what he has been educated to believe a fraud, and his companionship and intercourse should be only with the knaves and quacks who prey upon the public through their double dealing.

But, Gentlemen, it is not my province to criticise or suggest at this time the work of the teacher or student. It must ever be borne in mind that modifications of educational systems which have been wisely organized and sustained by long experience, ought not to be made hastily. And the fact that the profession within the last few years has advanced at a more rapid pace than probably at any former period of the same duration in medical history, is sufficient to controvert the charge of insufficiency on the part of the teacher and the learner.

I congratulate the State Medical Society upon the stability and unity of its membership, and the influence it exerts in giving character and maintaining the line of demarkation that separates the regular from the irregular practitioner. Liberality is commendable in all our relations

in this life, but we have treasures of knowledge in our profession, notwithstanding what the world may think to the contrary, that the State Society must guard and defend with zeal from the encroachments of the empiric art. I am proud to know that you breath the air of ethical purity, and represent the standard of professional character sufficiently high to be honored and cherished as an object of gratifying contemplation. I congratulate you that the warm friendships that are initiated on the annual gatherings, will be productive of kindness and fraternal feeling, and will exert a beneficial influence in the opportunity afforded of making the acquaintance of the distinguished men of the entire State.

We greet you, Medical Brethren, as representatives of a time-honored profession, old and young meeting in council solely for the purpose of devising for the general good of our race; can there be a higher or a nobler purpose? It is no overstrained eulogy of the medical profession, to speak of its unselfishness. I need but to refer to various epidemics of recent date, and recall to mind the afflicted South. And yet true heroism and true courage are more displayed in the every day occurrences of the professional life of the faithful medical man, in combating with the dire invasion of fever in its foulest and most horrible haunts, than were shown in the most terrific battle ever fought, yet we seldom see obelisks of marble, and equestrian statues, erected to commemorate the noble self-sacrificing deed of the often unrecompensed physician. Although calumny, obloquy, ingratitude and cold neglect, often assail us, it is gratifying to hold up the portrait of the true physician, as sketched by the master pencil of one who deservedly holds high and distinguished rank among female writers of the day: "The skill of the physician puts in requisition the highest faculties of the human intellect, as its administration calls forth the tenderest sympathies of the human heart. The kind and able physician is a human benefactor. He gathers up the treasures of learning and experience, that he may dispense them again to the suffering brethren. He comes with his timely succor, cheering both body and spirit with the single boon of health. He raises the sick man from his couch of pain, and sends him forth elate and vigorous for

fresh enjoyment. He restores the ailing, and rejoices their despondent friends. He gives new life to the sick, and revives the hopes of those who depend on the sick man's recovery for subsistence."

Welcome is written over our doors, and falls from the lips of thousands that have received the innumerable blessings of life and health, secured and maintained through the instrumentality of our progressive art. I stand with reverence and awe before the men of this epoch of our medical history, when I contemplate the vast contributions of valuable discoveries the regular profession has given to the world during my professional life. The fact that ovariotomy alone has within the last thirty years contributed more than thirty thousand years of active life to woman, calls out the admiration, love and gratitude of the entire world. In the vast field of scientific research, our profession in its beneficial results to the human race, takes no second place. As the mariner's compass during all varieties of weather and seasons, points with unerring certainty to the north, no less constantly and unerringly should all our efforts be directed to the dignity, honor and usefulness of our profession.

ADDRESS OF THE PRESIDENT,

BY

J. A. MURPHY, M. D.,

CINCINNATI.

ADDRESS OF THE PRESIDENT,

BY

J. A. MURPHY, M. D., CINCINNATI.

Gentlemen:

I appreciate the honor you have conferred on me in choosing me to preside over your deliberations. The subjects worthy of elaboration before you are many and interesting. A history even of the progress of our science and art for the last year would command your earnest attention.

It seems to me best, however, to present for your consideration some questions of pressing importance, not only for their professional, but also for their public interest. These questions are the treatment of lunatics, the management of dipsomania, the necessity for a State Board of Health, abuses that need correction, specialism and a more efficient organization of the profession.

THE LUNATIC ASYLUMS.

The building of the asylums and the treatment of the insane properly belong to our profession. If then there is anything wrong in either the construction of the buildings, the treatment or the general management, the responsibility morally falls on us. There is not one man in a hundred among the laity equal to giving advice or suggesting a remedy for any of those errors.

Believing that the management, the treatment, and even the buildings are defective, and have failed to afford good results for the immense expenditure of money, or even to render scientific results commensurate with our knowledge of diseases of the nervous system, I propose to point out the defects and suggest the remedies. The crowding of

five, six, or eight hundred lunatics in one building, constructed though it may be with the highest regard to location, ventilation, water supply and drainage, is a mistake. It is a mistake in several ways. Insanity is only a symptom of brain disorder. It is not the disease, but only a sign, and falls under the treatment applicable to very many other diseases.

Admitting this general principle, why, I ask, should all of those hopelessly incurable, the feeble minded, the epileptics, and indeed many acute cases, be shut up in the wards of an asylum? Such treatment is not directed to those suffering with any other disease of the general system. Who would advise that all those afflicted with any one of the three forms of phthisis, catarrhal, fibroid and acute miliary tuberculosis, should be placed in a hospital? We know such treatment would be disastrous in the main; some improve and even recover, who are carefully treated in the wards of a modern hospital, but the great majority will die. Fresh air, occupation, good food and amusement are the essential remedies, without which medicine is of little avail.

It may be said that insanity differs from many diseases. While this is true, it still more resembles them. It is not the brain, in the majority of cases, that needs the chief attention, but the conditions of special organs, or the entire economy.

Confining every insane person in an asylum, is as great a mistake as it would be to place every dyspeptic in a hospital. The moral effect on the imbecile, the melancholic, and even on those with acute mania, is bad. Who is it that has passed through the wards of an asylum, that has not been moved with the appeals for liberty—the entreaty for out-door exercise?

Practical evidence of the truth of these statements is to be found in the history of Gheel, in Belgium, and the establishment of the Colony of Insane at Fitz James, near Cleremont, in France.

Lest some of my audience may not be familiar with the organization of these two establishments, I will give a brief sketch of them. "The town of Gheel, in Belgium, contains a population of 11,000. In this population, 800 insane are domiciled in families. Each family takes care

of one or more. The head of the family acts as nurse or care-taker of those entrusted to him. The medical superintendent of an asylum places the patients in the families, being careful to select those whose intelligence and domestic accommodations are suitable. The insane patient participates in the occupation, labor and amusements of the family in which he lives. When he is unoccupied he walks freely in the streets and highways, being watched by the inhabitants generally who lend assistance when necessary to the care-takers. The only sign of the asylum is an infirmary, where those who become excited and uncontrollable are confined."

"The main remedy at Gheel," to quote from M. Pain,* to whom I am indebted, "is absolute liberty. The valuable resources of the asylum, the result of law, order and discipline, are certainly replaced by the pleasant and exciting realities of social life, for in this home of the father, nurse and care-taker, there never comes anything to mar the sweet and consoling affections of the family."

This treatment of the insane has been in existence for many years at Gheel. The Colony of Fitz James was established in 1847. There is nothing about it that recalls confinement. The farm is a large one, and is divided into four sections. 1st, the administrative department, in which the superintendent and male paying patients reside; 2nd, the farm, where the colonists live; 3rd, the house occupied by the female paying patients; 4th, the building occupied by the laundry and laundresses. On the farm are found all kinds of agricultural implements. A steam engine works several machines. The colony consists of three hundred lunatics, composed of acute and chronic cases and convalescents. The work on the farm is performed by one hundred and seventy men, and ninety women do the work of the laundry. The employes number forty-five.

"It is wonderful," says M. Pain, "to see with what pleasure those patients who were not accustomed to farm work accept the various duties wholly foreign to them. In the midst of the attractive details of this new life, the lunatic feels the influence of social life. The regular work

*Nov. Dictionaire de Medicine et de Chirurg., art. Asile.

performed in the pure air of the fields harmonizes his functions, re-establishes his strength and improves greatly his much altered health. We must add, also, the great benefit which results from the communication constantly going on between the asylum and the colony, from which result many medical indications, proving valuable resources in treatment. Influenced by example, the melancholic is lifted little by little from his torpor; under a pleasant sky, he takes interest in his animals, and gives tender care to his plants, and in the end breaks away from his sombre preoccupations. Idiots and imbeciles become docile and laborious, and the active and disciplined life of the colony metamorphoses many of the incurables and those carefully watched as dangerous. If there is not always a cure, there is at least some consolation given to those abandoned by science. There has never been a suicide to sadden the life at Fitz James, and escapes are more rare than at asylums where every obstacle to flight is necessarily interposed."

The advanced students in neurology are fully persuaded that restraint of all kinds, as enforced in asylums, is not only in very many cases a detriment to the general health of the patient, but a positive obstacle to a speedy cure.

The results obtained at Gheel and Fitz James teach us that we in this great State of Ohio are pursuing a hurtful system.

Every hospital, after a time, becomes the cause of diseases peculiar to it, so that patients who remain any length of time in its wards will suffer with them—called hospitalism.

The same law holds good in a more marked degree in our asylums, as they are constantly full.

Hence we find a large number of abdominal diseases in women and cerebral disorders in men. The expense, too, of the support of so large a number of insane in idleness, who might in a great measure be made self-supporting, while improving their health, is another question of the deepest importance. Without giving statistics, we are safe in stating that insanity and diseases of the nervous system are rapidly on the increase. Modern civilization with its continued excitement and want of rest developes the nervous system too early, and disorders and weakens it.

The five asylums of the State are now full and some are crowded. The entire number in all the asylums is quite three thousand. Accurate statistics are wanting to give the number who are imprisoned in county infirmaries and cared for at their homes. It is safe to say that the number is a thousand, making four thousand insane in the State. Of this number, the majority are hopelessly incurable. Expensive to the State, suffering from confinement and physical restraint (in many cases), their general health being impaired, a burden and sorrow to the superintendent, who is forced to take them up in his statistics, to make a favorable report of cures, why continue the system?

Why not advise the State to purchase a large farm and erect on it substantial but plain buildings, and put three or four hundred at work under the direction of a prudent and experienced superintendent? I believe they would produce enough to furnish food for themselves, and at the same time perform much of the labor incidental to a large establishment.

Evidence is abundant to show that the general health would be better, that suicides would be rare and that flight would not be more frequent than from ordinary asylums. The time is approaching when it will be necessary, if we continue the present system, to erect another expensive building to protect and treat the increasing number of insane who cannot be cared for in the present asylums.

Before this is done, let this Society investigate the whole subject through a committee. The superintendents of the asylums cannot do this. "Cabined, cribbed and confined" by the pressure of political appointment and the mean and belittling influences of politicians and their henchmen, they must not be expected to move in the advance, even if they are convinced of the injustice to the tax-payers, the inhumanity to the patients and the utter want of modern science in the treatment.

THE MANAGEMENT OF THE ASYLUMS.

The present management of the asylums is the subject of much just criticism. The boards of trustees are in too many instances appointed by the Governor as a reward

for political work performed or to be performed, or else as a mark of eminent respectability, which means eminent ignorance and general lack of qualification for the duties of the office. It is a remarkable fact that those most fitted for the duties of trustee—distinguished medical men—are rarely appointed, nay, even are not solicited to take the place. Sometimes it strikes me that a Democratic-Republican form of government, with all its vaunted claims of being the best, seeks to reward ignorance and elevate mediocrity. Certainly in the boards of trustees of our asylums this remark has in the past, if not at present, been found true.

If we have a high-toned Governor, qualified by education to look at the charitable institutions without his political spectacles, we may get some good men appointed to the boards of trustees. Still a certain number must be Republican, and an equal number Democratic. Who would not laugh to scorn the man who would prefer a surgeon because he was a Democrat, or an obstetrician because he was a Republican, or an oculist because he was a hard-money man? And yet we see our State, with its boasted civilization, its excellent system of public schools, its thirty-six colleges and universities, its nine medical colleges and its law school, bowing its neck to the basest, meanest and wickedest system, through its Governor, of making the appointments of those who control its charitable institutions depend largely, if not entirely, on their political prejudices. In no other government pretending to high civilization is such a debasing system witnessed.

"The stream never rises higher than its fountain." As a result of bad boards of trustees, we have superintendents appointed, in some cases wholly unfitted, by reading and study, and much more from the want of clinical experience, to take charge of an asylum, and treat scientifically the various forms of insanity. In some cases men have been appointed whose medical experience and reading were very limited. In other cases, good men, possessing many qualifications, have found themselves overwhelmed with the menial duties properly belonging to a steward of a good hospital.

A superintendent should be a scientific physician, appointed for the sole purpose of treating the patients. He

should have nothing to do with the raising of potatoes, the making of ditches, the purchasing of stores or the repairing of buildings, which under the present system absorb the most of his time.

The other portion he is occupied in making fair weather with ignorant, prejudiced, and even foolish members of his board, so that he may keep his office.

The superintendents of our asylums should in every case have had two or three years' clinical experience in an asylum before they are given full charge. To this should be added the requirement of one or two years' clinical experience in some large city hospital.

If all duties but those of prescribing were taken from him, we could then, from a qualified man, demand clinical teaching in the wards or the amphitheatre of each asylum. What are the asylums doing for science? Absolutely nothing, except it may be the few grains of clinical wisdom we can pick out of the bushels of statistics published in the yearly reports.

Clinical lectures are not delivered in any of them. The system is so bad, even, that the young men appointed as assistants receive no encouragement to study, as there is no hope of reward or preferment. The assistant is the servant of the superintendent.

In some of the asylums at the present time, young men are appointed assistants whose medical education is wholly wanting in clinical observation or teaching. Yet these young men perform the largest part of the work in treating the patients.

The words insane asylum, or asylum for the treatment of the insane, are badly chosen. These houses should be designated by the name which properly belongs to them, hospitals for the treatment of diseases of the nervous system. They must be brought under the laws which govern all large hospitals; they must be regarded as places where science and art alone speak, and from which scientific results will flow, of value not only to the public, but to the profession.

Finally, they must be made training schools for young men whose tastes lead them to the study of the pathological states of the brain and nervous system.

The present system of appointing superintendents on

account of political or social influence, must be broken up. The requisites must be high scientific attainments, ability to teach and good moral character.

How are these changes to be brought about? Only by and through the influence and work of our profession.

To accomplish a part if not all of this useful work, I am fully persuaded that the the best men in our profession must take a sufficient interest in politics to have themselves elected to the legislature.

The dark ways and demoralizing work of the ordinary so-called politician are offensive to every high-toned man. Yet it seems to me that, in the country at least, by a united effort in each county, we may be able to elect a considerable number of good physicians.

The honest citizen, of whatever calling or profession he may be, owes a debt to the State. Who owes a greater one than the scientific physician? Who can be of more use in the legislature?

Still more, the public is to be educated that the asylums are only hospitals, and that it is no more just or humane to look first to the politics of trustees and medical men who govern and treat the patients, than it is to regard the politics of those whom it calls during its hour of pain and sickness.

I speak plainly, but without prejudice or ill-feeling to the superintendents of the asylums. Like every honest physician, I have been pained at the management of those institutions. Every two years the *morale* has been shaken so that disorder and bad feeling have been excited among the employes and servants. The superintendents have been discouraged, and forced in some instances to enter into a defense of their characters against scandalous newspaper charges. The general result has been to shake the confidence of the public and damage the health and well-being of the patients.

It remains, then, it seems to me, for this Society to take active measures to improve the management of the asylums and place them on a strictly scientific basis.

As guardians of the health of the people, morally, mentally and physically, the duty so to do stares us in the face.

DIPSOMANIA.

We come now to the consideration of a question of equal importance and interest. What shall be done with the large class of people laboring under dipsomania?

The courts, and even many intelligent physicans, do not admit dipsomania as a form of insanity.

The superintendents of our asylums, while admitting it to be a distinct form, are unwilling to retain such patients. In this course, they find themselves justified by the more urgent demands of patients laboring under various forms of insanity from general causes. So it comes to pass, under the eyes of every one before me, that many men and women are not only rapidly destroying themselves from an uncontrollable, insane appetite, but, what is still worse, are in too many cases procreating children with the same insane appetite.

I assume that all will agree that there is as great a difference between dipsomania and ordinary drunkenness as there is between daylight and darkness. It is true that the person who uses alcoholic drinks intemperately may after a time become a dipsomaniac, yet there is still the wide difference between the two. A dipsomaniac cannot resist the thirst for drink, while he who becomes intemperate may resist and overcome the habit.

The dipsomaniac is born with the tendency or predisposition, and only needs the favorable circumstances to develop it. He will in some cases develop the disease by the first drink of alcohol, or the first full inhalation of chloroform, or by a full dose of chloral, morphine or opium.

The dipsomaniac loses all moral control of himself; he forsakes friends and relatives; he wastes his fortune and that of his family; he loses all appreciation of the truth, and when in the height of the disease he is wholly irresponsible.

It presents two forms: one in which it appears periodically and continues for days or weeks. In the other, when once it manifests itself, it continues until the patient is placed in confinement, so that he cannot obtain drink to gratify his insane thirst.

In both cases the outbreak is generally preceded by an uncontrollable craving or thirst for some form of alcohol. The drunkard, as a rule, becomes so of his own free will.

He does not begin to drink from a craving or thirst, but from the influence of society. He has no absolute taste for alcohol, but by constantly drinking, even in moderation, he forms the appetite, and is only content when it is gratified.

What can be done to cure the dipsomaniac? I am almost prepared to say that he is incurable, and that the only treatment suitable is confinement.

The confinement should not be that of an ordinary asylum, but that of an institution specially provided. It should be located on a large tract of land, where not only labor in the fields should be enforced, but where also labor in skilled occupations should be demanded.

For those disposed to escape, special provision should be made.

The majority of this class will require a life-long confinement. A certain number, from the effects of hard labor for a time, may regain their lost will-power and blunt the thirst for drink.

All nations and peoples, as far back as history gives us an account, have liked the effects of alcohol. We cannot eradicate this taste. We cannot cure dipsomania or drunkenness by legislation. We might as well attempt to eradicate a diathesis by legislation.

Dipsomania is an inherited disease, and is to be treated in the way already indicated. Common drunkenness is a vice to be treated by society. A high moral tone running through our civilization may arrest it. When, however, society becomes corrupt from a long war, or from luxury, then do all vices run riot. I make no appeal for drunkards; let society punish them by imprisonment and hard labor. I appeal strongly for measures to control the irresponsible and insane dipsomaniac. If he gets any recognition, it must be by our profession. It must be recognized as a form dangerous to its victims and of the gravest injury to society.

To provide the means to support one or two institutions suitable to the treatment and management of this class, is not a difficult task. By changing the Constitution of the State so that license laws to deal in alcholic drinks may be enacted, a sufficient revenue could be procured. This revenue I would appropriate in part or whole to support these institutions.

A good result would immediately follow such recognition and treatment of dipsomania. Common drunkenness would diminish. This is hard logic, I know, to many, but history supports it as the logic of facts. An evil or vice that cannot be eradicated or prevented, is always less hurtful when regulated by intelligent legislation.

A STATE BOARD OF HEALTH.

Although efforts have been made by this Society at different times to get a law enacted creating a State Board of Health, nothing has been accomplished. The number of physicians who understand the necessity and importance of such a Board, either to the people or the profession of the State, is very limited. Possibly it is expecting too much of the ordinary practitioner, uneducated as he is in sanitary science, to grasp the subject, or even to speak an intelligent word in its favor. The startling idea is yet to be drilled into the heads of too many that we cure but few diseases, while by a wise observation and application of sanitary laws, we may prevent many whose course is defined and whose end is often fatal.

What is State Medicine, that it should have a board to execute its mandates?

In the language of Dr. Chaille, of Louisiana, who has written ably on the subject, "State medicine is the application by the State of medical knowledge to the common weal, and embraces every subject for the comprehension of which medical knowledge, and for the execution of which State authority, are indispensable."

The State has wisely fulfilled its duty in part. It has established institutions for the insane, deaf and dumb, the blind, and reformatory schools for vicious and wayward youth of both sexes.

Medical education has so far been regulated, that every one who proposes to practice in the State must have the authority of a diploma from a medical school.

For the enforcement of the medical knowledge and laws of jurisprudence, nothing has, and in all probability nothing will be, done for a generation to come.

The ignorance and indifference in the public mind (and I might say in the professional) are so great that only the

education of events and the teaching in primary and higher schools can remove it.

Almost daily, in civil and criminal trials in our courts, do we witness the utter want of knowledge of medical jurisprudence displayed both by lawyers and doctors. Few men are qualified to give expert evidence, and yet we witness the blush brought to the face of all scientific men by the utter ignorance of too many who attempt it. The public belief is that a doctor is a doctor, and that he is learned, or ought to be so, in everything from giving a purge to deciding on the question of sanity or the analysis of the contents of the stomach for the poison. In older civilizations, all this, as well as every question of medical jurisprudence, is given over to those who by scientific research and experience truly deserve the name of experts, and through science speak with authority.

For public hygiene or preventive medicine, the State has done nothing. Will it do anything in the near future, is a question that can be better asked than answered.

Whether any laws embracing the enforcement of the principles of hygiene may be enacted or not, they will fall still-born, unless a State Board of Health is created, with proper officers to enforce them.

Public hygiene or preventive medicine consists in the "study of the avoidable causes of disease and death, their removal, and their cost and influence on morality and human progress." Many subjects are embraced under this division of State medicine. I may name a few of them: The registration of births, deaths and marriages and prevailing diseases; the prevention of the adulteration of food and the detection of diseased food; the provision for a supply of pure water and air; the suppression of many nuisances and unhealthy occupations; the proper construction of healthy houses and their proper ventilation; the drainage of cities, farms, and all waste or unused lands.

Included also under this head, we must not omit to mention a complete sanitary survey of the State, so that the causes of disease produced by soil and air may be known and avoided. With a complete sanitary survey, we would be able to warn the consumptive, the rheumatic and the scrofulous to avoid certain localities, and thus prevent the development of a diathesis, or even arrest it.

How often are we called to treat endemic and epidemic diseases, due to filth, whose march is like a great army with banners, carrying destruction to all before it.

The health, too, of the physician and his family is of the first importance, and is always to be taken into consideration. The control of contagious and infectious diseases is a great subject in itself, and at the present time demands urgent attention. If the truth were known, as many children have died of scarlet fever and diphtheria in the State in the last year as fell victims to yellow fever in Memphis or New Orleans in one epidemic.

Who is excited? Who asks what can be done? And yet when the John Porter passed up the Ohio, two years ago, spreading yellow fever wherever she landed, people far and wide were alarmed—ready to submit to any measures, no matter how severe, to stop the voyage of the ill-fated and death-dealing steamer.

Children not well recovered from scarlet fever are allowed to attend school; the funerals of those dying with diphtheria and scarlet fever are attended in many places in the State by children and parents, thus spreading these fearful and fatal poisons.

One case of typhoid fever in a neighborhood or a village commands little public attention, and is not of unusual interest to the friends of the patient, except from loss of time and expense, and yet what disease not infectious is more dangerous?

The dejecta, which contain the poison, are emptied into a shallow privy or, what is worse, on the ground, or still more cruel and disastrous, are thrown out so as to poison the wells, cisterns or water courses, and in this way communicate the disease to all who partake of the contaminated water. This poisoning, if of the water of a brook or stream of some size, may be felt for miles by people who drink its water, or even use a small quantity in their milk.

Is a bank robbed, the whole community is aroused and a large reward is offered, and the keenest detectives are put on the track of the burglar. Is any crime committed, the entire community is excited to arrest the criminal. Scarlet fever, diphtheria and typhoid fever may appear and distroy many children and young persons in a village

or hamlet, and the only remark let fall from the few is, what a severe visitation of God!

No Board of Health, with power to act through a skilled officer, exists, to seek out the causes and remove them, and thus arrest a most dangerous disease.

Small-pox has destroyed thousands in the State, and will destroy other thousands ere we obtain a law by which vaccination shall be compulsory. Strange to say, in the face of thousands of cases proving the protective power of vaccination, there are still to be found some physicians and many people who oppose it. Though the safe and certain protection of heifer vaccination has removed all danger of communicating small-pox, yet the objections still hold.

I have thus pointed out some of the reasons in support of a State Board of Health. The State is interested in the health and well-being of each and all of its citizens. One pauper and one broken-down man from avoidable disease should be the subject of deep interest to every citizen. Both are the subjects of public support, and both may procreate children who will inherit more or less the mental and physical disorders of their parents.

The importance of this subject becomes apparent when we consider the fact that the State exercises no supervision over the construction of houses inhabited by the poor laboring classes, so that in large cities the tenement houses are favorite dwelling places of infectious diseases. Still more, owing to the defective ventilation and insufficient supply of pure water and bad drainage, the health is impaired so that children die in great numbers and adults drag out a weary and unhappy life, perishing before the ordinary expectation laid down for people of sound constitution.

The school houses, instead of proving blessings, are too often only curses to children. From the violation of sanitary laws, myopia, anemia, and various nervous diseases, are frequently produced.

Is not the State interested in the health of its children? If so, should it not exercise its protective power in seeing that the buildings devoted to school purposes shall be all that modern science approves?

Finally, we as a profession need a State Board of

Health with full power to regulate the practice of medicine. The large cities and towns of the State abound with empirics and boasting charlatans, who not only damage the health, but destroy the lives of many. Although we have a law forbidding any one to practice medicine without a diploma, it is not enforced for the want of special officers.

In establishing Boards of Health, public policy demands, that the law shall require the examination and registration of every one who proposes to practice in the State. Whether he professes to be a homeopath, an electic, or a scientific physician, the fact of his possessing a diploma from a reputable school of his sect should be sufficient. All others should be prevented. There is only one true science of medicine, and while we recognize all systems based on one idea, as empirical, we must in the establishment of a State Board of Health recognize them in so far as to give them representation. Homeopathy and eclecticism so called, are but shams, living only on the credulity and prejudice of a few, who like novelties and delusions. "To be deluded is to be happy," was the remark of Dean Swift. The scientific physician is little moved by such delusions. History repeats itself. Delusions are a necessity, have existed in one form or another, and will continue so to do. The progress of art and science is constantly overreaching them, and out of their ranks there springs either some new hair-brained theory or else an old one, resuscitated in a new dress. We are interested so far as to have everyone who proposes to practice prepared by a good preliminary education, and well-grounded in anatomy, physiology, surgery, obstetrics, chemistry, pathological anatomy and materia medica. Indifference can only be felt for any peculiar views entertained as to the action or doses of medicines. We must allow patiently and kindly the public to swallow little pills, or small doses of moonshine, or to take roots and herbs in powder, pill or decoction, as it seemeth good to it. The experiments in physiology leading to more accurate knowledge of the functions in health, enable us to understand pathological anatomy, or diseased physiology, which joined to preventive medicine, will overthrow one aft-

the other all these systems—the unhealthy off shoots of true science.

I would then have a Board of Health composed of three scientific physicians, with one representive from irregular systems and a well educated civil engineer.

This Board should have power to establish local boards of health in all counties, and in large cities and towns.

Everything concerning the public health should be placed under its care with power to enforce its acts.

During the last session of the Legislature, a bill introducing these views was introduced, but it never got beyond a first reading.

Will not this society, will not the entire profession of the State, take such action as will insure its passage at the next session of the Legislature?

SOME ABUSES THAT NEED CORRECTION.

Since the introduction of the hypodermic syringe, its use has become so common, that no physician is considered equipped who does not carry one in his pocket. It is not for me to describe the rapidity of the action of medicines introduced into the system by it agency, nor the wonderful degree of immediate relief from pain. Is not everyone before me ready to bear witness to both of its great therapeutical offices? Still, I am free to say, that the hypodermic syringe loaded with such potential remedies as morphia, atropia, and strychnia, is used too frequently. We are teaching the doctrine that pain is not physiological, and consequently in every case it is to be overcome if not prevented. It is used for the most trifling pain, or uncomfortable feeling. It is used, loaded with morphia, to compose the fretful, weak or hysterical woman; to quiet a gastralgia, the result of over-eating; to give grateful and continuous sleep.

It is used, I believe, by some, to show their wonderful power. In what way can we show our wonderful power so strikingly and happily as by giving a hypodermic injection of morphia to one writhing with pain.

As a consequence, many people have learned its use, and throw into their bodies morphia, atropia, or both, on the slightest provocation. The habit grows on them, for

has not the great poet told us that "use doth breed the habit?" As a result, we find the number under the morphia habit greatly on the increase, Indeed, I know several persons who are hopeless victims to this dreadful habit from the use of the hypodermic syringe.

It is far better that a patient should suffer even severely from pain until opiates by the mouth exercise their slow and sure effect, than that pain should in ten or fifteen minutes be cut short by a hypodermic injection, and the morphia habit be fastened on him.

Let every one before me ask himself whether he has not used the hypodermic syringe in cases where he has had cause to regret its use, even though he may have almost instantly extinguished pain?

Our first duty, it is true, is to quiet pain, but in doing so, let us be sure that we do not leave a greater evil.

The abuses of specialism have in a great measure been corrected, by the good sense of the profession at large. There is still too strong a disposition manifested by some so-called specialists to locate all diseases, functional or organic, in their favorite organ.

With some it is eye and ear—with others the throat; with another class it is the uterus and ovaries, and still again, it is the skin, or the nervous system. At present it is difficult to say which looms the brightest, and most offensive, above the medical horizon, the gynecologists, or the so called neurologists. If a woman has any disorder of her nervous system, she must, according to some of these gentlemen, first consult a gynecologist and have her womb explored by tents, sounds, injections, and specula. If, on the other hand, she complains of a leucorrhea, a dysmenorrhea or menorrhagia, and applies to a gynecologist stating incidentally that she has a nervous symptom, she is sent to the neurologist to be examined with ophthalmoscope, dynamometer, esthesiometer, and, above all, with the continued and interrupted currents of electricity.

It is thus difficult often to see the difference between advertising charlatans and so-called scientific specialists. Let it once and for all be understood that the principles of special and general pathology, with a therapia founded

on careful observation and sound judgment, still govern and control us. Too often the man whose vision is defective, the woman whose uterine functions are at fault, and he whose nervous system is disordered, will discover from the careful investigation of the general practitioner, that the whole economy is disturbed, with a marked local intensity in some one organ.

It is not the advice of the specialist that is needed, but the good judgment of the scientific physician whose mental grasp is not bound down and limited by the "pent-up Utica" of specialism. Disease is not a unit. No one organ can be diseased without reflex symptoms, and the converse is eqally true, that disturbance of the general system is often reflected on a particular organ. In health, man is to be regarded from a mental, moral and physical aspect; and is it not true that when sick, we come far short of our duty, if we look only at one organ of his wonderful make up? There are a few men, whose thorough medical education with special skill in the diagnosis and treatment of the disorders of one organ, entitles them to the respect they so freely command. They have done much in the interest of science and humanity. It is not, however, of this small number that complaint can be made, but of the other class, whose main characteristics are mediocrity and pretension, thrusting themselves impudently on the profession, and holding themselves up in every possible way, before the public, as possessing remarkable skill and certain merits.

MEDICAL ORGANIZATION.

The profession does not make the impression on the public it should do. This is due to the want of a more complete organization by medical societies in towns, cities and counties. In some counties there is no medical society, and even in some of the large cities of the State the same lamentable state of affairs exists.

Where no medical society exists, we find the medical men inferior in education and experience, and pursuing the daily routine as commercial men. The public sentiment in such a community is inclined to quackery of all kinds. Quacks flourish wherever a high-toned, well-educated, and united profession does not exist.

Public sentiment needs educating, by scientific high-toned physicians, to these facts:

1st. That the true science and art of medicine is a unit —its object being the cure of disease, and the general welfare of the people.

2d. That every true man loving the study and practice is honest, and little disposed to do anything that is false, or in any way to practice the black arts of the charlatan.

3d. That the characteristics of the scientific physician are continued study, observation, and the communicating of the results to the profession.

4th. That, as he is a gentleman desirous of doing unto others as he would have others do unto him, he is a supporter of the code of medical ethics, which "is intended to furnish certain principles and rules of action" for each member of our calling.

5th. That the science and art of to-day claims only to cure a few diseases, if by the term cure we understand the arrest of morbid action.

6th. That, while this is true, we yet have power to prevent many diseases.

7th. That, from the study of the natural history of disease, we have learned the cause, duration and course of many diseases, and can conduct them to a safe termination, when all the circumstances are favorable and the patients of sound constitution.

How is this education of the public to be accomplished? Is it by the man who daily gives advice or medicine for measles, whooping-cough, or diarrhea, with the occasional adjustment and dressing of a simple fracture? Is it by the man who is opposed to medical societies? Is it by the man who consults with every one who may call on him.

Certainly not. He cures, in the popular belief of the day, a patient with measles, whooping-cough or diarrhea; so does his neighbor, a great charlatan; so does any good old grandmother, and so will nature, in the absence of all doctors and medicines. This is the man who is an apprentice—aye, worse, who keeps his profession down among the illiterate and the superstitious. Such a man has a remedy for every symptom and a cure for every disease. In what does he differ from the blatant charlatan?

There are two objections, with many, against medical

societies. The first one with some is that, being engaged in the calling as a commercial venture, they like the competition that is so foreign to the honorable intercourse that should exist between all good physicians.

It is this class who stop at no means to get business, even to consulting with irregular practitioners, and men guilty of practices grossly immoral.

It is this class who under-bid in their charges; who publish their cases in the daily journals; who advertise themselves by boasting in church and society.

The second objection is opposition to the Code of Ethics. In this they resemble all quacks. The man who is not a gentleman by nature and education, cannot be made one by law or ethics. Yet it is for such that civil and criminal laws are enacted by the State, and for such society, so-called, has enacted its rules of etiquette, and for such all professions, and even guilds of artisans, have created codes of ethics. No man is superior to his profession. To be well spoken of and esteemed for scientific attainments and high-toned behavior, is to be valued above all reputation with the public. Every doctor needs the support and advice of his brethren. The end of him who withdraws from professional association and defies its ethics, is unhappy.

The ground-work of all permanent success, distinction, and usefulness, is laid in the good will and respect of professional colleagues. The people may for a year, or years, give to the bad man, learned though he may be, its shekels and a quasi reputation, but like dead-sea apples, they will turn into ashes at the touch of the hand of the profession.

Let the members of this Society use their influence to organize the profession in every town and county where societies do not have an existence.

All good men will find it to their advantage to become members, and the bad will feel its beneficial influence. Public sentiment and respect for scientific medicine will be elevated by the works, example and behavior of gentlemen associated together.

These societies may be the arena where the principles of preventive medicine can be discussed, and oftentimes with great benefit to the public. In one word, to bring up the public to a proper appreciation of the power of medical science, we must unite, and show that we hold a posi-

tion in no way inferior to either of the other professions. The organization of the profession in Great Britain is so complete that one hundred and twenty-four physicians—many of them very distinguished—have been elected members of Parliament. In France, too, several very eminent physicians are members of the Assembly. These are the results of thorough medical organization.

Finally, let us each and all, animated with a deep sense of our responsibility to God, to whom we shall answer; to humanity, whose most sacred trusts are confided to our care, and to those who shall succeed us, continue to work, that our science and art may be kept abreast with the progress of the times.

AN EXAMINATION

OF THE

PHYSIOLOGICAL AND THERAPEUTICAL

Action of Gelsemium Sempervirens,

BY

C. E. BEARDSLEY, M. D.,

OTTAWA.

AN EXAMINATION

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PHYSIOLOGICAL AND THERAPEUTICAL

ACTION OF GELSEMIUM SEMPERVIRENS.

By C. E. BEARDSLEY, M. D., OTTAWA.

This powerful drug has been known to the medical profession since the year 1830, if not before that date. Statements have been made by a number of observers as to the action of Gelsemium upon man and the lower animals, which in the main seem to agree. It has been prescribed in a variety of diseases, and with varying results; as facial neuralgia, intermittent fever, influenza, spermatorrhea, dysmenorrhea, tetanus, paralysis, &c.

In large doses, it produces general muscular paralysis, affecting certain groups of muscles more energetically and more quickly than others, and in very large doses it produces death by asphyxia. I quote from the American Pharmaceutical Association of 1873, the effects of a toxic dose of Gelsemium on man, which in the main agree with my own experience and observation:

"The symptoms by which its effects manifest themselves in the animal economy, seem to indicate that the energy is primarily exerted on the cerebro-spinal centers, and secondarily on the respiratory apparatus and heart; the functions of the former ceasing before the latter. The motor nerves of the eyes are attacked first, objects cannot be fixed; dodging their position; the eyelids becoming paralyzed, and drop down, and cannot be raised voluntarily; the pupils largely dilated; there is a feeling of

lightness in the tongue; it ascends gradually to the roof of the mouth; pronunciation becomes slurred; the extremities refuse to support the body, and erect motion without support becomes impossible; the pulse gradually becomes more frequent, often rises to 120, or even to 130 and more, beats per minute, is small but regular; respiration then becomes labored, the mind remaining clear, however. This state will set in about one hour and a half after the ingestion of an overdose of the drug. All these symptoms will disappear after about two hours, leaving no unpleasant effect or derangement of the organism."

Dr. Roberts Bartholow, in his work on Materia Medica, describes its action thus: "In moderate doses, but sufficient to produce decided physiological effects, Gelsemium causes a feeling of languor and mental calm: slowing of the action of the heart; dropping of the eyelids; dilation of the pupils, and some feebleness of the muscular movements. In large doses, the physiological effects are as follows: vertigo, double vision, amblyopia, paralysis of the levator palpebræ so that the upper eyelid cannot be raised; dilated pupils; labored respiration in consequence of a paretic state of the respiratory muscles; slow and feeble action of the heart; great muscular weakness, and sensibility to pain and touch much reduced. These effects are produced in about one half hour after the stomach administration, and last two or three hours, when they subside. When lethal doses are taken, the above described symptoms occur in a more intense degree. The gait is at first staggering, but the power of muscular movement soon ceases, and a sense of numbness diffuses over the body. The eye-lids drop (paralysis of the levators), the pupils dilate widely, vision is lost, and the pupils cease to respond to the stimulus of light. The lower jaw drops, and the power of speech is lost in consequence of paralysis of the muscles of the tongue. The respirations are labored, shallow or irregular; the action of the heart weak, feeble and intermittent; generally the skin is covered with a profuse perspiration, but no other evacuations take place."

On the domestic cat, in one case experimented upon by me, not only vomiting but purging occurred. This may obtain in cases under observation for several successive days, or in the earlier stages of its action before the drug

has paralyzed the unstriped muscles. Dr. Bartholow's investigations have led him to believe that Gelsemium is a paralyzer of motility and sensibility, *as the primary effect of the drug*; that sensibility is first affected in cold blooded animals, then motility; and in warm blooded animals, motility is affected before sensibility. I have been unable to detect any loss of sensibility in man or the lower warm blooded animals, unless they were in a moribund state, and death inevitable. In the cold blooded animals (frogs), I am satisfied sensibility is first affected and then motility, but the effect is secondary only.

I might here quote from Dr. Ott, but as he and Dr. Bartholow agree as to the action of Gelsemium on both the cold and warm blooded animals, it would be repeating what has been so well said by Dr. Bartholow.

My own experiments were made on the warm blooded animals, mostly the domestic cat. What led me to repeat many of the experiments of such able men as above referred to, was not the hope to establish an error in their reasonings, nor in their researches, but to discover, if possible, why it was, and is, prescribed in diseases having opposite symptoms, indicative of different causes through different lesions, and seemingly with good results, if all reported cases be true.

It has been prescribed as a nerve sedative, as a nerve stimulant; in paralysis, and in tetanus, etc., while opium has been prescribed as its synergist, and as its antagonist. The same can be said of its relations to belladonna, digitalis and strychnia. These drugs have all been prescribed, either to increase, diminish, or modify the effect of Gelsemium, as each prescriber knew, or believed he knew, whereon his faith was founded. We think it an admitted axiom in physics, that the same cause always produces the same effect, all things being equal. But it would seem from the varied ailments in which this drug has been prescribed, that it was an exception to the rule. From careful observations and experiments, I am led to believe that this drug, under the same conditions, always produces the same physical effects: therefore, the same phenomena will be observed in each individual of the same class, in the several species of animals. To have the same effect, it is necessary to administer the same quantity and quality

of the drug in each case. The different effects observed by increasing the dose up to the point of asphyxia, are only apparent, not real, but each increase of dose only points more clearly to the same ultimate result, paralysis and death by asphyxia: nor could I discover the slightest deviation of its course in any single case. The larger the dose, the more marked were the phenomena. In illustration of what I have said, I will review a typical case of gradual poisoning of a domestic cat with the fluid extract of Gelsemium, administered hypodermically.

June 1st, 1880, 3 P. M. I gave to a large cat, weighing five pounds, five minims of Tilden's fluid extract of Gelsemium, hypodermically. (A large portion of its alcohol had been removed by evaporation, and the loss replaced with distilled water.) The respiration was 36 per minute, circulation 100 per minute. At 3:30 P. M., there were no symptoms indicative of the dose. Milk it lapped eagerly, successfully and naturally. At 3:40 I gave it, in the same manner, fifteen minims more; ten minutes later it seemed to be drowsy and lay with it eyes closed, the head sinking to the floor until its nose touched, then, partly aroused, it raised its head, licked its lips and nose, and relapsed into the same state; repeating the same act from time to time. At 4:00 P. M., I gave it a milk dinner, which it ate in an accomplished cat-like manner, and seemed to be much revived; walking around taking observations; its gait was unsteady; respiration 24 per minute; circulation 100, soft and full; pupils slightly dilated. At 4:30 P. M., I gave it ten minims more of the drug. At 4:45 it seemed stupid; trembling on the least movement; pupils were somewhat dilated, but it ate well. After eating, it lay down and dozed as it did at 3:40; respiration becoming rapidly abdominal; it no longer endeavored to hold up its head, and could not without great effort. At 5:00 P. M., I gave it milk, which it ate with no apparent difficulty; licked the dish, staggered off and lay down. The next morning, it seemed to be perfectly restored; respiration 24, circulation 100. I gave it a breakfast of milk, which it lapped with avidity. At 9:40 A. M., I gave it fifteen minims of Gelsemium hypodermically; selecting the left axilla as the point of insertion. In 30 minutes the pupils seemed to be slightly contracted; there

was trembling on movement, but a semi-stupor was the most pronounced phenomenon, which lasted about two hours.

June 4th, 11:25 A. M., respiration 30, circulation 100. I now gave this same animal twenty minims of the drug hypodermically, and immediately three ounces of milk, which it ate, licked its lips and cried for more. Fifteen minutes later, it seemed to be sick at the stomach, and endeavored to vomit; yet it tried to make itself agreeable by rubbing its body against my legs; frequently lying down and changing its position. Twenty minutes later, it had double vision. This was ascertained by holding up some raw beef and calling it; it heard very acutely, but could not hit the object aimed at with its paws or nose, without several efforts and the location thus measured. It had a staggering gait; the head dropped to the floor, and it trembled all over when coaxed or forced to move; pupils dilated, the hair on the tail raised, and, if not disturbed, it lay quiet and natural; respiration twenty per minute, and mostly abdominal, with a jerking expiratory movement of the abdominal walls. Forty minutes later, it lay on its side seemingly in a prostrated condition, and when forced to assume its feet, could lap milk without apparent difficulty, but with a slower motion of the tongue. I now gave it raw meat, but it refused to eat after making several attempts at mastication. The whole muscular system seemed to be in a paretic state. Coax, or force it to any part of the room, and it would lie down immediately, regardless of the bed being wet or dry, or in the presence of strangers. The hearing was abnormally acute, and the sensibility of the skin exalted. Sixty minutes later, the effects of the drug seemed to be passing off.

June 5th, 3:30 P. M., I gave twenty-five minims of the above drug, as on previous occasions. In fifteen minutes the pupils were dilated, and the animal walked with a staggering gait; the head dropped but it could lap milk with no apparent difficulty. Thirty minutes later, it could not stand upon its feet except by great effort. It seemed troubled with vertigo, and lay prostrate, uttering a faint cry; the hair on the tail raised and the tail in rapid motion. Thirty-five minutes later, its bowels moved fre[illegible]d, seemingly conscious of its wants, it sought a hi[illegible]

and endeavored to cover up the dejection. The respiratory movements were entirely abdominal; the under jaw dropped on the breast. Forty minutes later the respiration was more irregular and jerking; it lay perfectly prostrated with its tail in violent motion. Several attempts were made before it could regain its feet; then stagger a few inches, fall and utter a faint cry; lay prostrate a minute or more, and repeat the effort with the like result. Fifty minutes later, it rolled over from side to side as if in ecstacy, thrashing its tail furiously, the pupils were widely dilated, and the eyes staring. It now refused food, and continued making attempts to walk but was unable to coordinate its limbs. It would rush forwards, backwards, sidewise, falling and arising until exhausted. The sense of hearing and feeling were not impaired; respiration was thirty-five per minute. Sixty minutes later, after lying quiet for some minutes, it again became restless, mounted a waste basket some twelve inches high, but soon rolled off and lay prostrate, with froth in the corners of its mouth. Its vision was at no time lost, but impaired; it seemed to labor under a delusion; would catch at objects in motion eight feet from it, as eagerly as if only one foot. It protruded the tongue frequently, which was quite purple (cyanotic), and soon ceased to make any effort to move; respiration quickened; all the above phenomena deepened, and the animal died in a tonic spasm, resembling that of strychnia poison.

I made autopsies in all these cases, thus experimented upon, some immediately and others after some hours. In this typical case, the tongue and buccal cavity were of a dark purple hue; the right side of the heart filled with non-coagulated blood; the left auricle contained a small firm clot; the left ventricle empty and firmly contracted. The lungs were pale and shrunken, with no evidence of any congestion or inflammation. The stomach contained the food taken in the morning, otherwise it seemed normal. The liver was congested and friable, as well as the kidneys. The other abdominal viscera were normal. The brain and its meninges were highly congested; the sinuses and small vessels were filled with non-coagulated blood and serum; the ventricles of the brain were distended with serum, but I was unable to detect any lesion of brain sub-

stance. The meninges of the spinal cord were in a congested state throughout their entire length, and the cord seemed to float in a canal of serum; the serum being connected with that of the ventricles of the brain. In all of my examinations I was unable to find any inflammatory product in the brain, cord, or any part of the body. I am, therefore, led to believe that Gelsemium, like most of our therapeutic remedies, has a specific and definite action, and that action is spent upon certain definite tissues and organs, and is unvarying.

My observations have led me to believe that its force is spent upon the vaso-motor system, and it is this field selected for its action, if I may be permitted to use this simile. If Gelsemium paralyzes the vaso-motor nerves and their centres, as my experiments seem to have demonstrated, the result of such an action would be to increase the caliber of each blood-vessel presided over by it; the volume of blood also would be vastly greater in each vessel, and necessarily slower in motion; this I have demonstrated to my own satisfaction to be true. In corroboration of my views as to a vaso-motor system, I refer you to the labors of M. Schiff and Brown-Sequard, each of whom has demonstrated the existence of a vaso-motor system, that it is purely motor in function, and is distributed to the muscular coats of blood-vessels; also that the vaso-motor system of nerves have opposite functions to those of the sympathetic, and unlike the cerebro-spinal. Therefore we would naturally look for a lesion, and its accompanying phenomena, that would not occur when either of the two great systems, sympathetic or cerebro-spinal, was involved. If the cerebro-spinal system were alone affected by the drug in question we would most certainly find marked phenomena developed, either in motion or sensation, or both, which is not the case until its lethal effects are procured. As this nerve (vaso-motor) is principally distributed to the unstriped muscular tissue of the blood vessels, we are not surprised to observe that the heart and the striped muscles generally are unaffected, and are so only secondarily, and under the influence of toxic doses.

The first effects on man, as observed by me, of physiological doses, were, a sense of fullness in the head, with a general malaise; larger doses produced ptosis, diplopia and

vertigo, with or without affecting the sphygmograph needle abnormally, or the temperature. Lethal doses intensify all the former symptoms, affecting general motion, respiration and circulation, and in some cases sensation. Respiration was notably affected in toxic doses (paretic state of the respiratory muscles). The heart's action at first is less frequent, but as the effects of the dose deepen, and death becomes imminent, by asphyxia, it becomes exceedingly rapid in motion; the walls of the arteries lose their power to contract on the blood forced into them by the heart, and the blood is simply propelled onward by this *vis-a-tergo*. Those arteries which are protected from the striped muscular pressure, as those in the cranium and spinal canal, become congested and the blood reaches a point of stasis at, or shortly before, death. The temperature was not apparently affected in any case, coming under my observation, which is strikingly in contrast with paralysis of the sympathetic system. In paralysis of the sympathetic nerve, the part to which the nerve is distributed is elevated in temperature and each artery, when wounded, spurts blood with great force; which is not the case when the vaso-motor nerves are paralyzed by Gelsemium, and the same vessels wounded.

We have, therefore, in Gelsemium a drug whose action is spent upon the unstriped muscle of the blood vessels, through this vaso-motor system, and in lethal doses, paralyzes this system, producing all the concomitant symptoms hitherto described. In belladonna we have its direct and physiological antagonist. Belladonna, in physiological doses, stimulates the vascular system, being a sedative to the sympathetic. Gelsemium, in physiological doses, is a sedative to the vascular system by being a sedative to the vaso-motor system; in large doses it paralyzes this nerve, producing death indirectly, by asphyxia. Directly, it has no perceptible action on the heart, sensation, or the striped muscular tissue; indirectly, and in toxic doses, motion and sensation are affected, and in the order here given.

The therapeutic indications for Gelsemium are best manifest in acute inflammations of serous membranes, with a sharp or wiry pulse and a free capillary circulation. I have found benefit from its use in small doses, in scarlatina, ros-

eola and rubeola, pleuritis and meningitis; also, in convulsions of children, which frequently accompany the pyrexial state, in intermittent fever, by relieving the hyperemic brain. I have, in cases of insomnia from alcoholic debauch, found Gelsemium, combined with bromide of potassium, of most excellent service. In all cases of neuralgia, it proved worthless in my hands. In malarial and typho-malarial fevers, it has proved worse than useless, a waste of time. I have found it, in cases of acute dysentery in children, of decided benefit, markedly so if combined with ipecac. I would therefore be inclined to administer Gelsemium in all acute inflammations of serous membranes.

DISCUSSION.

Dr. H. J. Donahoe was surprised that the author of the paper just read had met with such ill success in the use of Gelsemium in neuralgia. The drug had gained its reputation largely in the treatment of neuralgia, especially of the facial variety. He had great faith in it in this class of cases.

Dr. J. A. Mouser had used it in the treatment of neuralgia, but had always combined it with narcotics and anodynes, so that he could not assert that Gelsemium was really the curative agent. He had obtained most excellent results, however, from its use in dysentery, and was inclined to regard it as almost a specific for this disease.

THE TREATMENT

OF

OBSTINATE CASES OF BLEPHAROSPASM,

BY

FORCED DILATATION OF THE SPHINCTER PALPEBRARUM.

BY

HENRY G. CORNWELL, M. D.

YOUNGSTOWN.

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Instead of the report on ophthalmology which I was to present to the Society, I have thought it advisable to offer a paper on a subject which will be of greater interest, perhaps, to you than a review of the advances in this direction during the past year. A report of the progress made in this science, to my mind, belongs more properly to the work of ophthalmological societies. When complete, these reports are only of interest to the specialist. When incomplete, they are only discreditable to their authors, and imperfectly represent the advances made in this important branch of surgery.

I wish, without further prefatory remarks, to ask your attention to a subject which I trust will prove equally interesting to you, one which has already been hinted at by my friend Dr. Smith, of Cleveland, in his ophthalmological report (1)* read before this Society in 1878, viz: *The Treatment of obstinate cases of Blepharospasm by Forced Dilatation of the Sphincter Palpebrarum.*

Blepharospasm is, as its name indicates, a spasm of the sphincter muscle of the eye lids—the Orbicularis Palpebrarum. It is a reflex continued spasm, is at times very obstinate, and is most frequently associated with the various forms of disease of the eye-ball and its appendages, chiefly

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* The numbers attached to the names of the authors refer to the bibliography at the end of the paper.

found in children and young adults, and which are in themselves in most instances of no very grave character. It is in this particular more especially, that it shall be noticed in this paper.

Violent reflex spasms, of a clonic or tonic character, of the orbicularis muscle are at times dependent upon irritation of the peripheral branches of the fifth nerve, in its distribution to other parts of the head. Disease of the teeth (2) and tumors, in rare instances, have been noticed as causes of this affection. At times it is one of the manifestations of hysteria, resembling some forms of vaginismus. In these cases there is no local lesion to be discovered. But these forms of blepharospasm are rare, and their further consideration is foreign to the purpose of this paper. Blepharospasm, in the sense in which I wish to consider it, i.e., as it appears in children and young people, associated with a variety of superficial diseases of the eye-ball and lids, is recognized by some authors (Schweigger, (3) Meyer (4) and others) as "Scrofular Blepharospasm." It is often of long continuance. Perhaps for weeks or months, the eyes can not be opened unless in a darkened chamber, which the patient seeks for relief from the distress which the light occasions. The eyes, when examined under an anesthetic or by feeble candle light, are found oftentimes to be in a condition which will in no way account for the excessive spasm of the palpebral sphincter. Phlyctenular diseases of conjunctiva or cornea, small cornea ulcers, of no very grave character, and granular lids, are in most instances the exciting conditions.

These phlyctenular and ulcerative diseases of the eye, are almost always associated with general malnutrition, and indeed this latter condition can be considered the predisposing cause of this, in part at least, hysterical spasm.

The epithet "scrofular," descriptive of the general condition of the patients, among whom this spasm of the eye-lids is found, means vaguely malnutrition in one of its forms. In this connection, it applies to an over-stuffed condition found in children who have unrestricted liberties at the table; in children who drink tea and coffee and eat strong and greasy food, unripe fruits, etc., or who live in over-crowded dwellings, with improper hygienic surroundings. Blepharospasm is manifestly a disease largely pecu-

liar to the tenement house population, the children of large cities. These cases are comparatively common in dispensary work, more rare in private practice. Abernethy is credited with saying: "I will tell you, *honestly*, what I think is the whole cause of the complicated maladies of the human form: it is their *gormandizing* and *stuffing*, and *stimulating* the digestive organs to excess, thereby creating *irritation*. The *state* of their mind is another grand cause —the fidgetting themselves about that which cannot be helped; passions of all kinds; malignant passions and worldly cares pressing on the mind, disturb the central action, and do a great deal of harm." A part of this, at least, is applicable in this connection.

An obstinate blepharospasm entails upon the patient a long period of suffering. The lids are kept constantly pinched together, and when forced apart (and this is by no means at all times easy to accomplish) a gush of acrid tears escapes. This excessive formation of tears, and their retention within the eye, no evaporation taking place, act to my mind as a further exciting cause of the disease, by keeping up the irritation of the conjunctiva and edges of the lids. It is perhaps unnecessary for me to add any explanatory lines to this last remark. Ophthalmic surgeons recognize the importance of having the tears conducted away from the eye in a proper manner. Galezowski considers, under the head of conjunctival diseases in his *Maladies des Yeux*, a form of disease which he calls Lachrymal Conjunctivitis. I am tempted to go on to greater length here. We know that stenosis of the lachrymal canaliculi, and the consequent retention of tears within the eye, operates injuriously in cases of blepharitis, and so must the constant soaking of the eye and edges of the lids react in an equally unfavorable manner in the disease under consideration. I quote from a recent paper on *Lachrymal Conjunctivitis and some of the other Injurious effects of Retention of the Tears*, (5) by my friend J. S. Prout, M. D., of Brooklyn, N. Y., the following paragraph:—

"The retention of the tears in contact with the tissues of the eye causes disease of the conjunctiva, cornea, and lids, and aggravates and indefinitely prolongs existing diseases of those parts, although these diseases themselves may have caused the stillicidium. Thus cause and consequence

exchange places, but the conjunctivitis, keratitis, or blepharitis, *cannot be cured* while the stillicidium persists."

In this disease, hyperæsthesia of the retina with marked photophobia is present, which is aggravated when the patients are kept secluded from the light, as they commonly are for weeks at a time.

I think I may permit myself, with what I have already written, to pass to the treatment of this affection, which I have made the subject of this paper.

*Since this spasm is largely dependent upon general malnutrition, attention to the general health of the patient, is of paramount importance; daily baths, plain diet, total abstinence from tea or coffee, are to be insisted upon. Calomel, antiacids, and tonics are to be prescribed.**

By way of introduction to the local treatment, I may emphasize the fact that the blepharospasm, which has supervened upon the irritable inflammatory condition of the eye, is now one of greater gravity than that from which it originated, and is the one which demands the chief attention of the surgeon, since the treatment of the inflammatory condition will be without good effect until the spasm of the lids disappears.

I may notice, as methods of treatment usually adopted for the control of this spasm, the shower and plunge bath; dashing cold water into the face, or plunging the head into water; evaporating lotions to the external surface of the lids, such as tincture of camphor and cologne water; conium or belladonna internally administered, counter-irritation to the mastoid process, to the forehead and temples; the injection of morphia subcutaneously, according to the method of Graefe in the region of the nerve stems; subcutaneous division of the supraorbital branch of the fifth

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*It will be understood, by a reference to the title, that this paper treats of a condition ("*Obstinate Blepharospasm*") which a few drops of a solution of atropine, or correcting some of the manifest errors in the diet and hygiene of patients affected will not cause to disappear. *Correcting errors in the digestion of these patients by the administration of small doses of calomel, or preparations of rhubarb and soda, together with syrup of the iodide of iron, and daily baths, must be followed out in all cases.* In a large number of these cases, such treatment, together with the treatment of the disease of the conjunctiva and cornea, will be effectual in causing the spasm to disappear. *In an equally large number of cases it will not be sufficient in my experience*, the same is equally true in the practice of all ophthalmic surgeons. On this page, I have given a recapitulation of the various methods of treatment which have been regarded by ophthalmic authorities as necessary in the management of cases where efforts directed to the control of the spasm itself become an important adjunct to the treatment of this class of eye diseases.

nerve, a plan of treatment first carried out by Graefe at Romberg's suggestion; canthoplasty (Agnew) (14); penciling the eruptions, which are of an eczematous nature about the edge of the lids, with the compound stick of nitrate of silver and nitrate of potash, a plan of treatment which Dr. Noyes, of New York, informs me has been effective in his hands.

All of these plans of treatment I have faithfully carried out, with the exception of the operation of Graefe, without obtaining the effect desired. Perhaps I have been disappointed as many times after a canthotomy as I have been gratified with the success which followed the operation, and so have other ophthalmic surgeons of my acquaintance.

During my service as Resident Surgeon of the Brooklyn Eye and Ear Hospital, in the years 1877-8, from observing a large number of cases of lid disease where more or less blepharospasm existed, I was convinced that this spasm aggravated the disease with which it was associated very seriously, and I made it a practice to force the lids of such patients widely apart every day with my thumbs. Observing good effects from this practice, I subsequently, in private practice, introduced a stiff speculum and under chloroform separated the lids, fixing them in this position with the instrument and allowing the patient to recover from the narcosis, after which it was removed.

In December, 1878, I presented this subject in a paper—Observations on the Treatment of Blepharospasm—(10) which appeared in in the December number of the *Ohio Medical and Surgical Journal.* The closing paragraph of this paper read as follows: "The favorable effect of this method of treatment is perhaps due to the combined influence of the forcible and continued stretching, thus breaking up the spasmodic tendency, and to the *hyperesthesia* of the ocular branches of the tri-facial nerves becoming obtunded by exposure to the air.

My daily practice is to anesthetise the patient and introduce a strong speculum, separating the lids of each eye widely and using atropinized castor oil, or allowing ice water to drop in the eyes; fanning the exposed globes as adjunct to the treatment. Occasionally I am in the habit of fixing the lids apart in a darkened room without anes-

thetics, gradually introducing the light, every day more and more, in very severe cases for three or four minutes at a time. This latter plan has been followed by equally good effects.

My second paper on this subject appeared in the *New York Medical Record*, in September, 1879, under the title of "Forced Dilatation of the Sphincter Palpebrarum as a means of Treatment in Obstinate cases of Blepharospasm," (12) in which I gave a further description of this plan of treatment.

The two following cases, which I regard as typical ones, are reproduced from that article :

Jennie D——, aged 14, of Irish parents, a resident of this city, consulted the writer Sept. 29, 1878. At the time of her first appearance her eyes were heavily bandaged and her head covered with a thick veil. An examination could only be made in a room lighted artificially. By means of lid elevators the spasm of the sphincter was overcome and the globes inspected. Right eye exhibited small central ulcer of the cornea, to which a leash of several vessels was directed from the limbus conjunctivæ. Marked circumcorneal injection, and severe ciliary pain. Left eye: peripheral ulcer on the temporal side of the cornea; injection of scleral and conjunctival vessels, with slight pain.

The accompanying blepharospasm was very intense; every effort on the part of the patient to open the eyes being without effect. She was very nervous and pallid from long confinement in a darkened chamber.

Treatment.—The use of atropia (4 gr. sol.), cold local baths of marsh-mallows and borax; tr. ferri chlor., after meals; daily sponge-baths, regulation of diet, etc. This treatment was strictly adhered to for three weeks without there being any manifest change in the corneal disease or the associated orbicular spasm. Oct. 20th, the patient was chloroformed, a stout spring speculum introduced, and the lids of each eye separated to their widest extent. Ice water was then permitted to drip into the eyes, and atropinized castor oil introduced. The chloroform was withdrawn after five minutes, and the patient allowed to recover from its effect. The specula were permitted to remain for

a few moments in order that the orbicularis might be effectually stretched in endeavoring to overcome the resistance which the instrument offered when efforts were made to close the eyes. Two days later the patient returned, able to open the eyes fully and without much effort. The lids were ordered to be stretched apart several times a day by friends at home, and, in conjunction with the treatment originally followed, the case passed on to a favorable termination.

John H——, aged 13, of Irish parentage, a resident of Niles, O., came under observation July, 1878. An examination obtained after some difficulty, on account of the extreme photophobia and spasm of the lids present, revealed chronic granular lids, slight pannus, and incurvation of lids—both eyes. His general health was much impaired, appetite poor, and skin blanched from confinement in a dark and dirty apartment for several weeks.

Treatment.—A canthoplasty was urged, to which operation his parents would not submit him. His friends were then directed to separate the eye lids to their widest extent several times a day, by means of the thumbs on their external surface. Atropia sol. (4 grs. to ʒ i.), and sulphate of copper used daily, general baths, coquilles, and fresh air, together with syr. ferri iodidi, and laxatives of syr. rhei and sodæ bicarb., were prescribed.

At the time of his next visit, four days later, the patient was much improved, the eyelids were more under control, and less photophobia was present. Thinking the improvement was chiefly due to the sedative action of the atropia, as an experiment the speculum was introduced and the lids of each eye fixed apart for ten minutes. Immediately upon the removal of the instruments the patient could open the eyes readily, which he continued to be able to do, and the case went on rapidly to convalescence.

These two cases taken from a number, illustrate the good effect which forced separation of the lids had in spasm of the sphincter palpebrarum, and its secondary good effect upon the nutrition of the eye-ball in many of its diseases occurring during childhood.

During the interval between the appearance of these two papers, Dr. C. R. Agnew, of New York, read an exceedingly

interesting paper before the American Ophthalmological Association on a kindred subject—Cases of Ophthalmic Disease in which Enforced Exposure of the Eyes to Light and Air was Salutary, (11) which is well worthy of your attention.

As a concluding word, permit me to say that to my mind beyond any question, we are too cautious in keeping our ophthalmic cases secluded from the light. I believe I have learned much from experience in this particular. I never shut a patient up in a dark room. My cataract cases are placed in well lighted apartments. The eyes are bandaged and a black silk patch pinned over this, it is true, but not longer than it can be helped. I have seen dangerous effects from shutting a patient up in a dark, close apartment. These patients become, after a week's seclusion from the light, of a waxen appearance and dyspeptic. Two of my cataract cases became absolutely imbecile at one time, in consequence of too much care in this direction. We have carried the matter of excluding ophthalmic cases from the light too much to the other extreme, as in the case of blood letting in days gone by. Reform is needed here. I cannot urge you too strongly to avoid this practice.

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DISCUSSION.

Dr. John Bennitt did not think that the writer placed sufficient stress upon the constitutional treatment of these cases. He was himself no specialist, but had to treat a good many of these cases, and he had come to regard them as generally of scrofulous origin. He then reported a case in which treatment adapted to this condition resulted in a prompt and perfect cure. He considered constitutional treatment as all important, the local treatment as secondary.

Dr. X. C. Scott said he cured nearly all his cases of blepharospasm by diet and bathing, and the local use of a little atropine. Had used the stretching of the sphincter, as recommended, but had gained nothing by it. He always shut up his cases of cataract, immediately after operating; and was usually able to send them home in from six to fourteen days. Did not believe in exposing eye patients too much to the light.

Dr. S. C. Ayres thought that one line of treatment would not suffice for all cases, but that the origin of most cases of the disease under consideration, was in the alimentary canal. He ordinarily commenced treatment by the administration of a dose or two of calomel, and followed this by liberal doses of quinine. If the pain were too great, opium was sometimes indicated. Good constitutional treatment, by baths, diet, cod-liver oil, syrup of the iodide of iron, etc., was of prime importance. He had used atropine locally, and also the constant current of electricity.

Dr. H. G. Cornwell, in closing, said that he recognized the condition of mal-nutrition as being present in most of these cases, and this condition, when present, must be treated as indicated by the gentlemen who had spoken. But there were cases in which the constitutional treatment did not suffice; stubborn, intractable cases, and it was the treatment of these that he had considered in his paper, and here it was that the value of the treatment by stretching of the sphincter manifested itself.

IDIOPATHIC CHRONIC CATARRHAL LARYNGITIS,

BY

BERNARD TAUBER, M. D.,

CINCINNATI.

IDIOPATHIC CHRONIC CATARRHAL LARYNGITIS.

By BERNARD TAUBER, M. D., CINCINNATI.

If, without any special claims to novelty in what I have to say, I should succeed in awakening a desire on your part to more carefully investigate a disease of this kind, this short paper will have accomplished its object. Diseases of the larynx receive but little attention from the general practitioner, and the reason often assigned for not recognizing Laryngology as a special department is, that its advocates do not cure the many chronic cases of laryngeal diseases. It is a fact, however, that, in chronic diseases of the larynx, when there are no absolute changes such as destruction of the organ or alteration of tissues, which so frequently follow long protracted disease, the results of treatment will be found equal to those of any other department of medicine for the short period it has been in operation.

Idiopathic chronic catarrhal laryngitis means a continued hyper-secretion from the mucous membrane of the larynx. It may be the result of an acute laryngitis, or caused by a damp atmosphere, damp residence, overuse of larynx, breathing a dusty atmosphere, abuse of alcohol, or any irritation of the larynx, etc. This local affection is often accompanied by catarrh of the pharyngeal or nasal mucous membrane, or of both together. It is as common in Summer as in Winter, from the constant changes in the weather and the careless exposure of the skin to the changes of the temperature. It is extremely commor this country, and troublesome to the individual from effect it has upon the voice. As regards age and se

is more frequent during the middle years of life than in childhood, and in men far more frequently than in women.

The subjective symptoms are usually inadequate to indicate the degree of disease existing. There is often not much more than a disagreeable sense of uneasiness, dryness, or a sensation of tickling in the throat. The patient has a constant desire to clear the throat of a little pellet of glairy or viscid mucus, which adheres to the vocal chords; each attempt to do so, rather increasing the sensation than diminishing it. There is also a sense of fulness in the throat, a consciousness of the presence of a layer of phlegm to be hawked up or coughed out. As a rule, there is no pain nor cough, except such efforts as would be used to cast off the adherent mucus, and the speaker finds it continually necessary to cough or to clear the throat in order to be able to proceed. Finally, there is an occasional and momentary huskiness of voice in speaking, and the voice becomes somewhat deep and is not clear.

It is the voice which presents the most striking changes. There may be noticed a fatigue in speaking, or diminished purity of tone, and vocalists will find the vocal injury manifested in loss of range, diminished endurance, impairment of the tone and quality, and want of control. In this state the patient may remain for years, his general health apparently unimpaired, and suffering but little locally, the variation in health depending upon the loss of voice, and its consequent effect on his nervous system. Frequently, idiopathic chronic catarrhal laryngitis will occur without having been preceded by the acute disease, or being referable to an initial disturbance or any special cause.

With the laryngoscope, we can watch the course of the disease and the effects of remedies. Congestion is seen of every degree, especially at the posterior part of the vocal chords, which, according to the severity of the disease, present at times a dirty red appearance, a partial or general hyperemia of pinkish hue, or the deepest red or livid; there is also swelling, and later thickening. The swelling so often noticed in the inter-arytenoid fold, interferes mechanically with the vibration of the vocal chords, the ventricular bands advance over the chords and restrict their movement, and during phonation the chords have lost coordinative power. This motor derangement is either due

to a mechanical interference with the movements of the arytenoid cartilages and of the vocal chords from thickening, or to true muscular paresis. We also observe shreds of mucus crossing the rima glottidis, or clumps of greenish mucus lying upon or between the vocal chords, at the space between the two cartilages of Santorini, or at the inter-arytenoid commissure, and often also mucus adhering to the lateral walls of the larynx. The trachea often participates in the hyperemia, and it requires a great deal of effort to dislodge the adherent mucus. This coughing also keeps up the congestion of the larynx. The epiglottis is also apt to become swollen and of deep red color.

My observations have demonstrated that idiopathic chronic catarrhal laryngitis, even when of long standing, very seldom leads to ulceration or erosion, and when the latter is present it is seen between the arytenoid cartilages or upon the glottis cartilaginea. The tendency to relapse is great, and the treatment must therefore be persevering and continued for a long period.

The treatment is *par excellence* local. Our aim must be to remove the cause, which unfortunately can not always be done. Great relief, however, can be given, and, by care, extreme annoyance will be prevented, often entirely removed. The patient should as far as possible desist from any effort to clear the throat. Absolute rest of the vocal organ is of paramount importance. He must stop smoking, and avoid staying in rooms filled with tobacco smoke. He must avoid exposure to varying temperature, must give up snuff, spirituous liquors and highly seasoned food. The action of the skin and the digestive system must be attended to, mental anxiety, or worry that the disease will run into a tubercular form, must be also removed.

The many failures in the treatment of this affection, must be ascribed partly to the physician, who promises to relieve or to cure the patient in a few weeks, and partly to the want of that energy on the part of the patient necessary for a long course of treatment. His endurance becomes exhausted, noticing no improvement. Again, the physician often advises the patient to use at home, two or three times a day, inhalations, either steam alone or medicated. In most cases, even if the patient is intelligent enough to use it properly, it will prove inefficient. Vapor inhalations

of a stimulating and astringent character are only valuable when used in connection with a rational local and dietetic treatment.

In one thousand cases of laryngeal diseases in my private practice, 156, namely 88 male and 68 female, more than 15 per cent, were true types of idiopathic chronic catarrhal laryngitis. The astringents used as topical applications, were nitrate of silver, 5–20 grains, sulphate, iodide and chloride of zinc, 10–30 grains to the ounce of water, etc. With strong solutions of nitrate of silver, from 90–120–240 grains to the ounce of water, the results were usually negative. I am indeed astonished that some Continental laryngologists employ in this affection a concentrated solution, or the fused nitrate of silver! This mode of treatment has always failed in my hands, and seems to me highly detrimental.

The excellent results I obtained from the internal use of sulphate of atropia in acute laryngitis and coryza, prompted me to combine it with an astringent solution.

For the last five years I have been in the habit of applying topically, with a weak solution of nitrate of silver–from 5–20 grains—also 1–180 to 1–120 of a grain of sulphate of atropia, and it has proved of greater value and efficacy than the application without the latter. The catarrhal secretions yielded and disappeared sooner, the interior of the larnyx became cleaner and dryer. As soon as the congestion subsides an insufflation of alum or tannic acid, two or three times a week, is all that is necessary.

Up to date, I have not noticed any constitutional effect produced by the local application of the atropia; the absorption seemed to be slight and gradual.

Should infiltration and hyperplastic thickening remain, the electric current, in both forms, will remove this difficulty, as also the muscular paresis.

Vocal gymnastics and lessons in elocution, with reference to breath-taking, are also very important, especially to the professional vocalist or speaker.

DRINKING WATER

FOR CITIES.

BY

W. J. SCOTT, M. D.

CLEVELAND.

1880—12

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DRINKING WATER FOR CITIES.

BY

W. J. SCOTT, M. D., CLEVELAND.

There are four things necessary for health, everywhere: plenty of sunlight and pure air, pure water, and healthy food. Any one of these being deficient in quantity or quality, will vitiate the influence, to a greater or less extent, of the others. The first three, Nature supplies almost everywhere in the greatest abundance. They should be perfectly free and uncontaminated. Plenty of pure water, which should be accessible to the inhabitants of towns and cities for common use and common good, should be a public provision. Many noble examples of such public provision may be referred to among old nations, and in some cities whose existence antedates the period of recorded history. Look at the magnificent aqueducts of ancient Rome, and the baths of Herculaneum and Pompeii. The necessities of all dense populations have left their impress on their history, although the reasons of their wants have not been written.

We are able, by personal experience and observation, to see why we cannot safely neglect the lessons which have been forced upon others, and are now surely coming to us. Many reasons might be given, why, for public as well as private welfare, we should have good, wholesome, and pure drinking water. The supply of this everywhere is derived in the most simple way, from springs, wells and rivers. The important consideration should be to keep these sources of supply free from contamination. This has been universally found to be impossible in dense populations, and hence as universally it has been found nec-

essary to seek supplies from some pure source. This is often done at great public expense, for the public good. The sources of contamination come from soil contaminations, principally from animal compounds, soluble in water and carried by the surface water, percolating through the porous diluviums and clay and sand strata of the earth. To preserve water pure in wells, these sources of impurities will have to be removed. This is an impossibility. The soil becomes saturated necessarily, and from this we have not only impure water, but impure atmosphere, arising from emanations from the putrefactive changes which are going on when warmth is applied to these conditions. These elements can be carried to considerable distances through the soil, as the courses of circulation are progressing in the soil at all times. The cutting of deep sewers often drains wells at considerable distances. Water descends through the soil to lower levels, as surely as the level changes. Nor does the density of the strata prevent this, provided the material is porous, and all materials above granite are porous to a greater or less extent. Sandy and gravelly soils are most easily percolated. But clays absorb water readily when their moisture has been removed. It is well known by the experiments of Pettenkoffer, that in clay, shales, and even sandstones, there is a circulation of water several feet in a day, and also that water in such conditions contains air, and that carbonic acid may be and is generated in such conditions to a depth of several feet below the surface, to from thirteen to fifteen feet.

The supply of ground water may be reduced, and often is very greatly, by evaporation from the surface, and then there is a capillary circulation from below upward. Of course, animal matters in solution would in this way be carried in such currents. Therefore the ground water supply should be kept free from all possible contaminations.

The most common sources of pollution are cemeteries, cess-pools, privy vaults, leaking and imperfect sewers, besides the thousand and one sources of soil contaminations, which are ever present in cities and towns. These sources of evil should be avoided as much as possible, so that the surface as it descends may not carry along with it animal compounds, which will become afterwards the source of ill-health and disease. Then the burying ground should

not be surrounded by a population depending on such sources for water, especially on the side of the declivity. No doubt the atmosphere of cellars may become saturated with these materials, at such times as they are warmed and the house above is warm, by the ascent of the air and water contained in the soil. How long will such conditions remain after burials cease? This question sometimes presents itself to authorities of cities, and it is hard to answer. I would say for centuries. I have seen human remains exhumed from mounds in central Ohio, over which large forest trees had grown, whose history and race had long ago been lost to knowledge, and yet they had when exposed to the atmosphere a strong smell of dead animal matter. Such compounds buried deep, go out slowly, but they would impart to water percolating them, animal compounds in a state to be put in solution and carried along in the currents. We find animal compounds in ancient limestone and old marl beds, which have lain there for centuries, and yet may be taken out by water under favorable circumstances. It is true that the continual rain fall and consequent movement from change of level and evaporation, would possibly remove such materials after a time, but the time would evidently be long.

The same argument holds in relation to sewers, cess-pools and privy pollutions. This is especially true as these ingredients are being continually added where they previously existed. The time for this purification would be of long duration. So the safer course would be to prevent the pollution by properly constructed vaults, which should be emptied at suitable times of the year. Such vaults should be built water-tight, and of such shape as to be easily cleaned, and to retain what goes into them. The practice of running privy-vault contents into sewers which must empty into streams and lakes, will in time become a source of great trouble, and lead to deterioration of the general health of people who use the water below. Sewers, when properly constructed, are great preservers of health and conveniencies, yet they may be a source of very great nuisances. The deleterious products of sewers are not fixed conditions, but are the products of what may be found in them under varying conditions and times. A

sewer gas at one time may be, and doubtless is, a different thing from that at another, depending on surrounding circumstances; and this not alone as to its own inherent properties, or depending upon organisms only generated in such places—echinococci and bacteria—which may be borne along with the escaping gases. These materials, both gases and germs, may be borne in the currents of water from such places, and become the sources of disease and all unwholesome conditions to all who are compelled to partake of them.

The cess-pool, to my mind, is the worst of all abominations, when constructed to be out of the way, and keep the premises clean and respectable; usually having a way to it from the house untrapped against the foul gases which will be there generated, and usually unventilated to prevent the escape of foul odors from within. It is usually so constructed that the liquid parts of its contents may be absorbed gradually into the soil, and pollute everything with which they come in contact. In these places are generated conditions and products more deadly than the same ingredients would produce under other circumstances. These elements find their way easily into wells in the vicinity, or even into springs when favorably situated. Animal excrementitious matters, and, indeed, any animal matters—nitrogenous compounds—with such conditions become the source of the most villainous products. I doubt whether we can always determine the character of these products, by determining their composition. It is now well settled that oxygen has more than one state without atomic change, that under certain conditions it behaves as something else. Ozone is only a condition, not something that has been added to the atmosphere. So it has been found that the pent-up, mephitic materials become much more deadly when they are produced under pressure in closed places. Water absorbs these materials, and may thus become the source of many forms of disease. On account of these sources of pollution, what is called surface water cannot be good for use.

The supply from small streams, which have not come far, or from ponds collected from surface drainage, must be also especially objectionable, if they are situated in inhabited localities. Such collections are necessarily charged

with animal compounds, ready to undergo other changes. Thus free ammonia, and albuminoid ammonia, are readily converted by fermentation into unhealthy elements. The water of springs coming through blue clay, which is a species of marl impregnated with animal debris, is often charged with these ingredients to such an extent as to be unwholesome. These old marl beds were deposited ages since, and have been soaked ever since without exhausting the supply of bad material. Albuminoid material may, when contained in such water supply, be destroyed by exposure in a reservoir, or better in two or three built at different levels, so that the water may be moved from one to the other, so that nitrogenous materials can be changed into free ammonia and escape into the atmosphere. In this way, in warm weather, much of the materials which would produce soil pollution escapes into the atmosphere as free ammonia, and will stimulate vegetable growth, if again put in solution as it would be in the first shower. But it may be carried far away from the first deposit. Urea, uric acid, hippuric acid, and all nitrogenous compounds, exposed to moisture and heat, with vegetable materials, are readily converted into free ammonia, and this is a less objectionable form. But this may again enter into putrefactive changes with other animal or vegetable materials, and become a source of mischief. These changing elements are the sources of great good in one way, and in another of great mischief.

Another source of water supply is from rain water, caught in showers and conducted to cisterns or receptacles for after use. Water thus procured and kept in clean receptacles, and kept well protected from foreign materials, is good for all practical purposes. This may be done to a great extent in the country, where the atmosphere is comparatively free from foreign materials. But this is not so in cities. Here the atmosphere is charged with a large amount of foreign materials; among them, dust from the ingredients of the soil, and animal and vegetable compounds, which find lodgment on the roofs and sheds from which the supplies are conducted. And this to such an extent that, in many cities where supplies are thus procured, many contrivances have been used, to prevent collecting the first washing in the showers. The first run of

the shower contains so much animal and vegetable debris as to cause putrefactive changes in the sediment collected. This is especially so if the cistern is open to admit other matter falling into it, as flies and gnats will be added to the sediment, and in this way the quantity of bad material is increased. But this is not all. Soon such supplies are filled with animalcules, which are increased in number and genera as deterioration of quality increases. They do no particular harm while living, but many of them are short lived and their dead forms are added to the sediment to increase the nauseous pollution.

It has been thought that the filter would obviate these difficulties. Simple tests will show that such water contains free ammonia and albuminoid ammonia, and often in such quantity as to be unhealthy, after passing a filter even when made of a solid porous brick or sand-stone. Cisterns in cities should be cleaned out every year to be tolerable, or that their supplies may not become the source of disease. It has been said by analysts that drinking water may safely contain a small quantity of nitrates and albuminoid ammonia, without being detrimental to health. Ten parts in two hundred thousand may be safe, but a proportion higher becomes bad; twenty, forty, or fifty, being very bad. I would take this with allowance, if the pollution had found its way out of an old cess-pool, or an old fermenting cistern, or an ancient, well-filled, abandoned, covered-up privy vault. These materials may be found in drinking water, English analysts say, one part in a million.

The most important question connected with this subject practically is, to determine the presence of such materials. Expert analysts, who have laboratory equipments and experience, can speedily make such investigations. A simple volumetric determination ought to be made by any physician, with a little apparatus, and a few reagents.

Two years ago, when I commenced to look after this matter here, I soon had my suspicions confirmed that we had no well or cistern water fit for use. So I took specimens from various parts of the city, and submitted them to an analyst. He determined the quality and quantity of the ingredients. His report of a number of specimens I submit in abstract:

WHENCE.	PARTS PER MILLION.		GRAINS PER GALLON.		REMARKS.
	Free Ammonia.	Albuminoid Ammonia.	CHLORINE.	Total Solids.	
Well water from Mrs. Shellentrager's, 34 Webster St.	1.00	2.00	In large quantity.	83.	The water is somewhat opalescent, containing many floating particles, and has an offensive odor. The dried residue is greasy. *Filthy.*
Well water from G. W. Scotts', 124 University St. . . .	0.01	0.10	In considerable quantity.	17.6	Beyond the limits of a healthy water.
From Mr. Davis, corner of Vega and Rhoades Ave's. . . .	0.00	0.06	In quantity.	33.2	Good.
Spring water from Jefferson St.	0.00	0.03	Proper amount.	40.8	Very good.
Well water from 134 Lorain St.	0.00	0.96	Large quantity.	40.8	Very bad.
From 24 Linden St., off Garden	6.40	0.80	Immense quantities.	43.	Contains nitrates in large quantity. *Worse than Sewerage.*
Erie St. Sewage . .	6.00	1.00	Large quantities.	Not estimated.	
Permissible	0.00	0.08	*	*	*Depends on circumstances.

DR. W. J. SCOTT:

Dear Sir—Enclosed I beg to forward analyses of samples of water received from you at various times.

In explanation let me say:

Free Ammonia represents the amount of nitrogenous organic matter (derived from the urea, feces, etc., in sewage) which has already decomposed.

Albuminoid Ammonia, that nitrogenous organic matter which has not yet decomposed, but which is prone and ready to undergo decomposition. Should any water intended for domestic purposes be found to contain both (no matter in how small proportion), it would show that decomposition was going on, so it should at once be condemned. We all know the value of nitrogenous organic matter in the shape of a good beef steak, and we are also well acquainted with the deleterious effects produced by consumption of decomposing or rotten flesh meat.

One point permit me to draw your attention to, and that is, the fact that well water may be good to-day, and to-morrow become contaminated through the sudden leakage of a cess-pool or sewer pipe in the neighborhood, or from surface leakage; especially is this dangerous and liable in a sandy soil.

The *Chlorine* may represent that normally present in chemical union with the calcium, magnesium, etc., and will vary according to the hardness of the water, but when found in large quantity, along with free or albuminoid ammonia, or both, it indicates that also in the common salt (chloride of sodium) of the sewage.

The *Total Solids* will vary with the soil whence the water arises, and up to certain limits (if sulphate of calcium and magnesium salts be absent or in minute quantity) are perfectly healthy. For my own part, however, I prefer a water containing about 10 grs. per gallon. *Nitrates* are also the product of the destruction of nitrogenous organic matter and should cause a water containing them to be wholly shunned.

Yours Respectfully,

R. S. G. PATON.

Chemical Laboratory, Med. Dept., Wooster University,
July 12, 1879.

These determinations were made by Nessler's test.

In further prosecution of the subject, I have followed a more simple process, not so much to determine the quantity of animal compounds as the fact of their presence.

Take 50 c. c. of water, and ¼ or ½ c. c. of a solution of permanganate of potassium, one part in a hundred, or enough to give a distinct reddish color in a test tube, and if the color is lost in six to twelve hours, you have a suspicious specimen. Now if it is desirable to arrive at reasonably correct determinations of the quantity of foreign materials, take 50 or 500 c. c., and see by the last solution what quantity it takes to obtain the point at which the specimen ceases to decolorize, and you have a good approximate estimate of the amount of nitrogenous material in solution. The determination of these questions is not only important in cities, but in the country as well. The location of stables and farm out-houses, in relation to the water supply or the natural drainage of the locality, are matters of the utmost importance. Yet how often have we all seen these considerations utterly neglected, and thought to be needless and of no consequence.

In this connection I mention a circumstance which came to my knowledge two years ago, in a town in central Ohio. There lived there a family who were well to do, except that they were sick all the time, some of them with anomalous conditions. Their large house fronts on a large open space, with a stable and out-houses in the rear; their well was said to contain remarkably pure water, sixty feet deep. On its having been suggested that the water supply might be at fault, it was said it was impossible. But on after examination, it was found that the privy vault had sprung a leak into the well, and there was no telling how long this condition had existed; a simple test would have determined this at any time. These conditions cannot be determined by taste or smell always. After this fact had been discovered, and water was procured from another source, all trouble ceased.

The tests for these are so simple that any person can make them. It is well to have proper appliances, however, especially to determine quantities. This is easily arranged with a litre bottle and a litre jar graduated to 1000 c. c., and a burette graduated in cubic millimetres. With these we

have a simple process of determining quantities very readily, with Nessler's test, or the permanganate of potash test. This volumetric examination does not give absolute results, unless done with great caution, but it gives the fact as well as any process. The fact is, the thing of most importance—knowledge whether there is a small or large quantity present—is easy of determination. Any compound which will make ammonia is easily found. Nitrates, nitrites, albumen, albuminoid ammonia, urea, uric acid, or free ammonia, are detected. These are the deleterious materials to be found. The salts of alkalies, of alkaline earth, are not especially objectionable, as they are ordinarily found.

These observations have been confined to one phase of the subject entirely. If we were to direct our attention to the microscopic department of the subject, then we would swell this report beyond the dimensions of such a paper. Besides, I doubt whether the living creatures, whether animal or vegetable, found in drinking water, have much effect on the health. But the ova of entozoa, and nematoides, may become the sources of great trouble. So may possibly bacteria, and echinococci. These sources I will not speak of at this time. The further investigation will no doubt develop considerations of great practical importance. A report on any one of these separate subjects would occupy sufficient time.

WHAT IS THE NATURE AND OFFICE

OF A

MEDICAL PRESCRIPTION,

AND TO WHOM DOES IT BELONG?

BY

G. S. FRANKLIN, M. D.

CHILLICOTHE.

WHAT IS THE NATURE AND OFFICE OF A MEDICAL PRESCRIPTION, AND TO WHOM DOES IT BELONG?

BY G. S. FRANKLIN, M. D., CHILLICOTHE.

This question has exercised a great many persons, doctors, druggists and patients, and seems to be entirely unsettled so far, and as long as it is unsettled, so long will it be a source of discontent to all who think their interests are involved. The following is an attempt to set forth as clearly as may be, the principles on which a fair judgment should be based, in hope of a possible solution in the future.

We all know, in general outlines, the gradual development and progress of both Medicine and Pharmacy. As an art, medicine dates far back in the known history of the world. Esculapius lived more than one thousand years before the Christian Era, or over three thousand years ago. His fame was so wide spread and great, that after his death he was deified as the special divinity of medicine and its votaries. Hippocrates flourished about 400 B. C., and the art of medicine under his tutelage had crystalized into rules and aphorisms which remain useful to this day. Pharmacy, as an art, must be dated long after these times. The first authorized Pharmacopeia was that of Nurenburg, A. D., 1542; the first British, A. D., 1618. Before these dates, the reigning authority was the "Rules and Recipes of Avicenna for the Manufacture of Medicines," dated A. D. 950. The very first mention* made of druggists in the writings of antiquity, bears date about A. D. 400.

Undoubtedly, the earlier physicians for a long time compounded and dispensed their own medicines, so that

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* Renouard History of Medicine, (Comegys) page 250.

there were no apothecaries or pharmacists needed. The crude drugs themselves were sold in common with groceries, in the same shops, and, of course, were badly discriminated and preserved. By degrees, physicians found it convenient to secure the services of an assistant, to compound and dispense the remedies which they had decided to be appropriate. From this step to the next succeeding—where one compounder and dispenser, known to be intelligent and skillful, could attend to the business of several physicians—the progress would be natural and easy. So long as no antagonism would be developed between these sister arts, the change would commend itself to every physician, as saving him a great deal of trouble, in compounding and preserving, and dispensing the medicines needed.

The orders, directions, or prescriptions passing from the physician to his assistant, or to his pharmacist, were undoubtedly at first given by word of mouth. Soon it was found convenient to set down in writing these orders, perhaps to assist the memory of the primitive pharmacist, perhaps to be preserved as a written record of the case, ready for reference whenever necessary. We will all recognize the truthfulness of the progress as thus briefly detailed, up to the time when Medicine and Pharmacy became entirely separate, though closely allied arts.

Now, what is the nature and essence of the prescription, as at present used? Undoubtedly, at first it had no external existence. It was merely an idea, a mental judgment of the physician himself, and had no external expression at all, except a final result, the compounded medicine. This medicine the patient received and used, knowing nothing of any prescription, as we understand it, simply trusting to the recognized knowledge, experience, and skill of his physician. This mental judgment was only an unexpressed affirmation, that in the case of a given patient, with given symptoms, at a certain given time, after a careful and intelligent examination of the case, such and such remedies were decided to be appropriate. In other words, it was the mental judgment, the decision flowing from knowledge, experience and skill, that constituted the value received and paid for whether such judgment were recorded on paper, or not. But now-a-days it is claimed that the written prescription is the value received, that the pa-

tient paid for it and should be allowed to keep it, to use it himself whenever he wishes to do so, and, perhaps, to start out as a medical practitioner, by recommending the same to all his acquaintances, who, in his opinion, are similarly affected. The absurdity of this claim is made apparent by several good reasons:—First. As we have just stated, because the value received is in the skilled mental judgment delivered, that such and such a remedy is exactly suited to the person prescribed for, at a certain given time, and under certain given conditions.

Second. Because even the next week, those conditions might be entirely changed, and the remedies given, or ordered, be entirely inappropriate, even to the person prescribed for, much more to any one else. For example, a remedy suited to the first stages of pneumonia, may do infinite harm if prescribed or administered in the second or third stage. So too, a remedy prescribed for bilious fever, at its inception, may well prove funereal if carried on to a succeeding stage. Thus we might go on through the whole category of diseases, the principle involved being that in all diseases there is a constant change going on, recognizable by the skillful physician, demanding a corresponding intelligent change of treatment, and rendering an ignorant administration of medicines both unwise and harmful. Indeed, I firmly believe that a large part of the chronic invalidism which we see around us, is due to the inappropriate use of medicines, perhaps salutary enough at one time, but the proper time for whose exhibition has passed away.

Third. As the law holds the physician liable in damages for malpractice, the responsibility incurred by him should always be a matter of careful consideration in every prescription given. He should study well the cases committed to his care, and he should aim to discharge this legal, as well as the far higher moral responsibility, in the most effective and safe manner. Of course, if he has given such careful consideration to the case when it is presented to his notice, and has, for example, prescribed a remedy containing two ounces of some given mixture, to be used in two days, in divided doses, his responsibility ceases when that two ounces has been administered as ordered, unless he clearly and in writing orders a repetition. But suppose

he has not ordered a repetition, even verbally, as could be proven by evidence of witnesses, but that the patient, of his own accord, has applied at the drug store for another bottle of the same remedy, has received it, and has used it: where does the responsibility rest in case of great damage resulting? Not with the physician, certainly, for the limit of his order has been reached; not with the patient, for the law would hold him ignorant of the properties of the medicine used, as it would a child who might buy sugar of lead and eat it for its pleasant taste, or give it to his playmate. Undoubtedly the druggist will have to shoulder the responsibility from the very moment that he undertakes to refill a prescription without the physician's direct order, at that very moment the physician's responsibility has ended and the druggist's has begun; his danger being largely increased because he gives no intelligent, careful examination of the case, to see whether the medicine will be appropriate or not. And yet we all know of druggists foolish enough to incur this great responsibility, by refilling prescriptions for mercurials, for opiates, for arterial sedatives, and numerous other powerful medicines, which are well known to be capable of great harm, and the whole transaction easily susceptible of proof in a suit for malpractice.

The essence of malpractice lies in an ignorant and injudicious application of known rules of medicine or surgery. He who calls himself a doctor, is held responsible before the law for the damages resulting from ignorant or injudicious practice. Now is it right or just that the doctor should be singled out for a suit at law for damages, and every one else—quacks, druggists, or wise neighbors—be permitted to go scot-free for inflicting the same or greater damage? No, indeed, it is not just; and if any effective method could be devised for proclaiming the responsibility of all quacks, of all druggists,* of all medicine-wise neighbors, as well as of all regularly educated physicians, the result ought to be beneficial to the medical profession and to a quack-ridden humanity at large. The educated physician certainly feels the weight of this responsibility, and it sharpens his intelligence and makes him very careful as

*See opinion of Judge Brady, New York, "Health and Home," April 20, 1872;—"Of the propriety of holding men to a strict accountability who attempt to practice upon the credulity of the afflicted and subject them to greater suffering, I entertain no doubt."

to his treatment in each case. But the quack, and the prescribing druggist, and the home-made doctor, think nothing of their responsibility, because they are never made to feel it by a suit for malpractice. You may ask, how could a druggist, for instance, be made to feel this responsibility, and consequently to cease prescribing? I answer, very easily. Suppose a physician has prescribed for two grains of morphine, to be divided into eight powders, with orders to take one every three or six hours, to meet a very special indication; that the medicine has been used with good results; that the patient, being pleased with the happy effect, wishes to continue it; that the doctor has either refused to order more, or is ignorant that more is being used; that the druggist supplies the patient's demands without any hesitation; that the result is a confirmed opium habit, with all its mournful train of damaged health, ruined capabilities, loss of domestic peace, &c., &c. Do you not think a suit for damages by any one dependent on the opium-drunkard would justly lie against the druggist who assumed the responsibility of dispensing the morphine so injudiciously? Would this prolonged, living death be much less doleful than a sudden taking away by one overpowering dose? Besides morphine, and other opiates, every well educated physician will tell you that there is hardly any drug known to the pharmacopeia, that is not capable of doing great harm, of wrecking the health, and thereby affording good ground for a substantial claim for damages. Chloral, chloroform, arsenic, tartar emetic, mercurials, various heart sedatives, and even quinine, are notably among the numbers of drugs, which, if used injudiciously, are known to wreck the health, and sometimes to destroy life. Ignorant use of all these remedies would afford good ground for a suit at law for damages, just as surely, just as equitably, as the surgeon is mulcted in damages for bad work in mending a broken limb, which he has ignorantly, or negligently treated.

The conclusions which seem to be evident from the foregoing considerations are:

A written prescription is not the value received when the doctor is consulted; his skilled judgment as to the disease in question and its proper remedy, is the consideration paid for.

The prescription is, by its history and its nature and essence, simply a record of the transactions which may be needed for reference, and, in the opinion of many, should be returned to, and kept by the doctor prescribing.

There is a very serious responsibility involved in prescribing drugs, since very few are harmless and most are capable of doing serious damage, unless used skillfully as to time, place, and circumstances.

The responsibility attaching to each prescription, ends with the exact amount of medicine ordered in that prescription, and cannot be carried along on the physician's account, unless under further direct orders.

Medicine and Pharmacy were never meant to be rivals, but co-partners, the interest of each being correlative with that of the other, and jealousy and quarreling between the two cannot fail to work damage to both, and should by all means be avoided.

A druggist, on being asked to refill a prescription, should always enquire whether the physician has directly ordered it; if he has not, the druggist should decline to shoulder the responsibility, and should refer them to the physician for further orders.

REPORT OF

OBITUARY COMMITTEE,

BY

ISAAC KAY, M. D.

SPRINGFIELD.

Report of Obituary Committee.

BY ISAAC KAY, M. D. SPRINGFIELD.

Ever since the organization of this Society, thirty-five years ago, it has been an appropriate and well sustained custom, at each of its annual meetings, to pause for a few moments, in order to make a brief note of those who, during the year, have been removed from us by the hand of Death.

We have ascertained, as far as possible, the names of all our members who have died during the last twelve months, and if any have been omitted it will be owing to our not having received the necessary information.

WILLIAM F. PAIGE.

1820. 1878.

Dr. William Franklin Paige was born in Granville township, Licking county, Ohio, April 19th, 1820, and died at his home in Johnstown, O., December 2d, 1878, from cerebral hemorrhage.

When about twelve years of age he met with a serious accident while at work with a carding machine, which

made him a cripple for life, in his right arm. This painful circumstance, no doubt, had much influence in turning his youthful mind towards the attainment of a good education, and finally of a profession. After a regular course of instruction at Kenyon College, extending from 1838 to 1842, he commenced the study of medicine with his uncle, Dr. Homer L. Thrall, who at that time was Professor of Natural Sciences in Kenyon. He attended medical lectures at the University of New York in 1844 and 1845, and then established himself in practice at Johnstown. He became a member of the Ohio State Medical Society, in 1864, and always endeavored to attend its meetings, taking a deep interest in the true progress of his profession. He was also, at the time of his death, a member of the Central Ohio Medical Association, and was spoken of by his fellow members, as a man of studious habits, laboring to improve himself, yet always interested in the welfare of others; ready and willing to help advance society, and especially to elevate the standard of the Medical Profession.

M. B. WRIGHT, M. D.

1803. 1879.

We now come to notice the death of one of the founders of this Society, and a man of national distinction in the profession. Indeed, were the necrology of North America, or even of the World, for the last twelve months, to be so epitomized as to include only a score of its most celebrated men, the name of M. B. WRIGHT would be entitled to a place among them. Such ample material for a biographi-

cal sketch has been furnished, by the numerous obituary notices which appeared at the time of his decease in the public journals, both secular and medical, and in the memorial addresses which were delivered and published soon after, that we find it difficult to condense or reduce this notice to the necessary brevity.

DR. M. B. WRIGHT was born at Pemberton, New Jersey, Nov. 15th, 1803, and died in Cincinnati, O., August 15th, 1879, aged nearly seventy-six years. After receiving a liberal education in Trenton Academy, he took a full course of medical instruction at the University of Pennsylvania, from which he graduated in 1823, and soon afterward commenced practicing his profession in Columbus, Ohio. During his residence in the last named city, DR. WRIGHT displayed such honesty, skill, industry and courage as to acquire a large and remunerative practice. He had quite a taste for Surgery, and, even during the first few years of his professional life, performed many of the capital operations, including the ligature of the internal iliac artery.

In 1833, he served as a member of the Ohio Legislature. He was elected as a Whig, and his talents and skill as a debater soon gave him the leadership of his party.

In 1835, he married Miss Mary E. Olmstead, of Columbus, with whom he lived very happily until his death. His bereaved wife and five children survive him. Among the children is Dr. C. O. Wright, now of Cincinnati.

In 1838, he was appointed to the professorship of Materia Medica and Therapeutics in the Medical College of Ohio, but in two years afterward he was transferred to the chair of Obstetrics in the same institution, and it was here that he acquired such high and deserved fame as a medical teacher and practitioner. He ceased lecturing at the college in 1850, but in 1860 was re-elected Professor of Obstetrics, and thus continued his brilliant professional career

until the year 1868, when he voluntarily withdrew from this branch of his public work. For more than thirty years, PROF. WRIGHT was on the staff of the Commercial and Cincinnati Hospitals, where he added much to his already great reputation as a clinical teacher.

In forming an estimate of Dr. Wright's character as a man, and as a practitioner and teacher of medicine, we can do no better than to make a note of what a friend and colleague of the deceased publicly declared on the occasion of his death:

"As a lecturer, his style was charming, his methods highly instructive, his teaching sound and practical. As a medical writer, he was clear and vigorous, often quite original. He dwelt but little in speculation, largely in facts. As a practitioner, he was not only one of the most painstaking, assiduous and conscientious, but his broad intelligence and sound, practical judgment, possessed him of superior skill.

"In addition to knowledge and skill, he possessed in an eminent degree, personal qualities which contributed largely to success. I refer to his wonderful power of inspiring confidence in his patients. So largely is the body under the influence of the mind, especially in sickness, that the physician who can inspire hope and confidence often brings to the bedside of the afflicted a means of cure far more potent than all the drugs of the pharmacopeia.

"Being a man of absolute purity of character, spotless virtue and full of sympathy, he had such access to the heart and affections of his patients as enabled him to come to the sick chamber as a ray of light, to stand there as the bow of hope and promise. He was great in his profession, and loved it for its works' sake. The ignorant inmates of the hovel, or the cultured in the palace of the wealthy, could alike command his skill. He never refused the cry of suffering.

"Dr. Wright had but one work, one purpose. To this he brought gifts, rich and rare, and freely consecrated them upon its altar. He goes down to posterity remembered not as a great and prolific author, for probably in but a single contribution to medical literature has he guaranteed quotation by writers on Obstetrics for all time. Neither will he be remembered by any worldly fortune he has accumulated. But he shall not be forgotten. He was a proof that unsullied honor and unselfishness remain yet among men. In his countenance was seen beaming pure benevolence. True, there was clearly defined firmness of purpose, absolute will—self assertion—but over it all played the divine sunlight of kindliness and love. His integrity was absolute, beyond the purchase of gold or the influence of place and power. His friendship could not be broken by any sacrifice. It was founded on a rock. He worked for humanity, not for himself.

"All good is of God. All of such work as this, though wrought manifestly through human agency, is nevertheless God's work. Shall the work endure, and the human workman be forgotten? No; this more than half century of a great and educated man's labor in the alleviation of human suffering shall not be lost. He had deep reverence for, and unshaken faith in, a Supreme God. 'Moral supremacy is the only one that leaves monuments and not ruins behind it' He has gone through the 'tragedy of life,' and has won for himself the wreath of immortality."

THOMAS B. WILLIAMS, M. D.

1821. 1879.

Dr. T. B. Williams was born in South Wales, A. D. 1821, and died at Delaware, Ohio, on the 20th day of August, 1879. He was brought to Ohio by his parents before he was quite one year old. After acquiring a good English education, he commenced the study of medicine under Dr. Ralph Hills, of his own city, and in the year 1849 commenced practice in partnership with his highly venerated preceptor, after having graduated from the Ohio Medical College.

On the 11th of October, 1855, he married Miss Nannie Ritchie, daughter of Col. John Ritchie, of Perry County, Ohio, who yet lives to mourn her irreparable loss. During the year 1859, under strong convictions of religious duty, he joined the Methodist Episcopal Church, of which he continued to be an active, consistent and devoted member until the hour of his transfer to the higher and better world. He was, for many years, a member of the School Board, in Delaware, and did more than his share towards bringing the schools of that city to their present state of efficiency and popularity. He served one term as member of the House of Representatives, from Delaware County; and soon after the breaking out of the war, he went with the 121st Ohio Volunteer Infantry as their surgeon, and was in the battle of Perrysburg, Chicamauga, Mission Ridge, etc., and finally marched with Gen. Sherman to the Sea. He arose rapidly, and was made Brigade Surgeon, which office he held until the close of the war. He be-

came a member of this Society in 1860; and was several times unanimously chosen one of its Vice Presidents, and always took a deep interest in its welfare. He was also a member of the Central Ohio Medical Association, and of the Delaware County Medical Society,

Dr. Williams died August 20th, 1879, universally missed and lamented by the people of the city, and, I may add, the State in which he lived. His active professional life had given him an enviable reputation, reaching far beyond his home, and long will his memory live in the minds of many thousands of persons who had been associated with him in social, religious and military life. Dr. Williams was not only widely known, but universally beloved. It was justly said of him that as a physician, citizen and soldier, he exhibited qualities that won the admiration of his fellow countryman. Gen. John G. Mitchell, who knew him most intimately, testifies upon this subject in the following words, and with this testimony we shall close this brief sketch: "It was my good fortune to be intimately associated with Dr. Williams for three years, in the field, and I have thought over our intercourse, covering as it did the most trying period of the war. He was always the same gentle, generous, chivalrous gentleman, always ready to sacrifice his own comfort and convenience for others; always devoted to his work, and faithful, never complaining. His whole life was eminently without fear and without reproach. It will be no easy matter for me to know what, in his death, will be the loss of his friends, and of the community in which he lived. He was one of the noblest men I ever knew, and the simple statement of his virtues is a monument more enduring than that of marble or brass."

RALPH HILLS, M. D.

1810. 1879.

Dr. Ralph Hills was born at Worthington, Ohio, December 13th, 1810, and died at Delaware, Ohio, on Thursday, October 9th, 1879, in his sixty-ninth year, being stricken with palsy, which suddenly and unexpectedly carried him off in the midst of his usefulness. The subject of this notice was the son of Dr. James Harvey Hills, a man of high standing and influence in the medical profession, who emigrated to Ohio from Connecticut in the year 1807, and settled in Worthington, where his son Ralph was born. About the year 1825, the family removed to Delaware, from which young Hills soon afterwards went to Hartford, Connecticut, to complete his medical education under the special tuition of his uncle, Dr. Eli Todd, a distinguished physician of that place. He then commenced the practice of his profession at Delaware, where he remained most of the time until his death.

In 1856, Dr. Hills was appointed Superintendent of the Ohio Lunatic Asylum, at Columbus, which appointment he held, with much success and credit, until 1864. Mrs. Hills, his wife and present widow, was, during the same time, Matron of the same institution, and their joint administration marked one of the most successful eras of its history. In 1864, Dr. Hills accepted an appointment as Superintendent of the West Virginia Lunatic Asylum, located at Weston, which position he held most satisfactorily to all concerned, until 1871, when he resigned the appointment and returned again to his old home in Delaware. In 1877, he was appointed Superintendent

of the Girls' Industrial Home, at White Sulphur Springs, in Delaware County. He inaugurated a course of improvements there, which have made the Springs one of the most attractive and interesting places in the State of Ohio.

Those persons who knew most of Hills, spoke of him as skillful and thorough in his profession, and as eminently possessing the confidence of his professional brethren, his patrons and the public. He was also patriotic, liberal and public spirited, taking a deep interest in all those matters which pertained to the improvement of society and the general progress of humanity. He was ingenious in invention, possessed great mechanical skill, and was remarkable for his aptitude in manipulating anything that came to his hands, as in his professional exercise, or in chemistry, or in architecture, or in illustration with pen or pencil. He made active use of his skill in designs, as the architecture of Delaware, Columbus, and other cities bears ample testimony. Dr. Hills was a man of sensitive nature, jealous of his honor, unselfish, genial and ever cheerful, abounding in that charity which believeth all things, and which ever prompted him to deeds of kindness, and to a compliance with the elementary truths and requirements of the Divine Law.

ALVIN BELDING, M. D.

1812. 1880.

Dr. Alvin Belding was born in Randolph, Portage County, Ohio, A. D. 1812, and died of bilious pneumo-

nia, in Ravenna, Ohio, on the 25th of February, 1880, in the sixty eighth year of his age.

Dr. Rufus Randolph —father of the subject of this notice— came to Randolph, O., from Cattaraugus County, N. Y., in the year 1807, and was the first physician in that part of Portage County, and one of the pioneer physicians of our State. This son of the early pioneer secured such advantages of an education as were to be had in Ohio at that day; and by industry and perseverance succeeded in this respect to an unusual degree. After having obtained what was regarded as a fair education for the times, he devoted some time to teaching school, after which he commenced the study of medicine. He began the practice of medicine in his native town of Randolph, during the year 1838, and remained there until 1848, when he removed to Ravenna, where he continued to live until the time of his decease, a period of thirty-two years. It may be emphatically said of him, that he died in the harness, having been in attendance upon the sick till the day upon which he was taken down with his last illness.

As a physician he was so long and so favorably known, that his skill was sought all around him, and in intricate cases he had to go great distances, thus making his professional life quite laborious. He was steadily and studiously devoted to his profession, and having a retentive memory and indomitable perseverance he soon attained to a high degree of influence among his professional brethren and fellow citizens. He lived in a lively exercise of Faith, Hope and Charity, and exhibited these lovely graces in an unusually marked degree in all his daily walk and conversation. His association with professional brethern was always kind, fair, and courteous, and he was most emphatically a man of many friends.

He had the honorary degree of Doctor of Medicine conferred upon him by the Starling Medical College, at Col-

umbus, in the year 1852; was a member of the Ohio State Medical Society, North Eastern Medical Society, and of the Portage County Medical Society, in all of which he held high and honorable positions.

He was twice married (in 1834 and in 1843), and leaves a wife, and a son and daughter, to mourn the loss of a kind and loving husband and father.

One of the most pleasing things to contemplate, in connection with Dr. Belding's life, was his elevated Christian character, and the reliable accounts which we have of his happy and triumphant departure hence, entertaining a strong hope and faith in a blessed immortality beyond the grave.

ROBERT RODGERS, M. D.,

1807. 1880.

Dr. Robert Rodgers was born in Cumberland County, Pennsylvania, September, 11th, 1807, and died at his residence in Springfield, Ohio, on Tuesday evening, Feb. 24th, 1880; in the 73rd year of his age.

After receiving an academic education, he graduated in medicine from the Medical Department of the University of Pennsylvania, in 1828. The first three years of his professional life were spent in New Hope, Bucks Co,, and Newville, Cumberland Co., Pennsylvania. In the winter of 1831, he came to Portsmouth, Ohio, and thence to Springfield in July, 1833, He united with the Presbyterian church in 1836, remaining a member thereof until his death. At different times he was a Director in the

Mad River State Bank, and the Springfield, Mt. Vernon & Pittsburg Railroad Company. He was also president of the Springfield Fire Insurance Company. But his active business life was devoted to his profession, and, though uneventful, whatever of good he did was largely in this sphere. He loved his calling, and was the friend and helper of every worthy physician, and particularly the young. He aided in the organization of the Clark County Medical Society, and was at two different times its president; his interest in the attendance on its meetings ceasing only with failing health. About 1805, he retired from general practice, and for the last eight years had been wholy disabled from active labor. Since September, 1875, he was confined to his home, and for four years was a patient suffer er from slowly and steadily increasing mental and physical disease.

He became a member of the Ohio State Medical Society in 1853, and when opportunity allowed was an interested attendant upon its annual deliberations. He was justly regarded as one of the most active and skillful practitioners in Central Ohio, and he was the very soul of honor in regard to the observance of our national medical Code of Ethics. His whole deportment towards his fellow men, of whatever rank or condition, was distinguished for its strict and hearty accordance with the highest requirements of Christian rule. His professional life was singularly exempt from those infelicitous misunderstandings and quarrels, which but too often mar the dignity and good character of our profession. His position in social, financial, professional and religious circles, throughout a widely extended acquaintance, was untarnished. The complete purity of his private life, was one of the most notable features of Dr. Rodgers' personal character, and his name yet remains with us as a fragrant memory.

T. J. FARRELL, M. D.,

1826. 1880.

Dr. T. J. Farrell was born in Ireland, 1826, and died in Columbus, Ohio, April 23d, 1880. He came to America about the year 1829, and settled in Columbus April 2d, 1872, having removed from Kirkersville, O. Dr. Farrell was taken very suddenly ill in the early part of the day, and died in a few hours afterward. His death was, in the opinion of his physicians, the result of heart disease. Dr. Farrell left a wife, and two sons and a daughter, to mourn his loss. As a husband, father, citizen, and physician, Dr. Farrell was kind, and well liked by all who knew him. He was not only a member of this Society, but also of the local medical societies in that part of the State in which he lived.

LIST OF DECEASED MEMBERS

OF THE

OHIO STATE MEDICAL SOCIETY,

WITH

DATE OF ADMISSION AND DATE OF DEATH.

LIST OF DECEASED MEMBERS

OF THE

OHIO STATE MEDICAL SOCIETY,

With Date of Admission and Date of Death.

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Ackley, H. A.	Cleveland . . .	1850	
Allen, Peter.	Kinsman	1850	
Amos, C. E.	Cleveland . . .	1852	
Andrews, F. M	Dayton	1862	*Army.*
Angel, E.	Akron	1852	
Arnold, Emil	Ironton	1873	
Baily, J. S.	Freeport	1873	1875
Baggs, James	Ontario	1866	1868
Baker, A. H.	Cincinnati . . .	1846	1865
Baker, Timothy H. . .	Wooster	1851	1871
Ballard, H. D.	Findlay		1871
Belding, A.	Ravenna	1853	1880
Blackman, G. C. . . .	Cincinnati . . .	1860	1871
Boalse, A. N.	Lockburn . . .	1848	
Bœrstler, G. W	Lancaster . . .	1846	1871
Bonner, Stephen	Cincinnati . . .	1847	1876
Boyle, C. E.	Columbus . . .	1851	1870
Bracken, W. C.	Jersey	1868	1872
Brennan, Thomas. . . .	Dayton . . .	1855	1858
Bridge, W. W.	Marion	1859	1864
Brown, B. S.	Bellefontaine . .	1855	1873
Brown, E. T.	Logan	1849	
Bronson, James	Newton Falls . .	1852	
Buckner, Philip J. . . .	Cincinnati . . .	1850	

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Buckner, William . . .	Hamilton . . .	1853	
Butterfield, John	Columbus . . .	1846	1847
Caldwell, Joseph	Huron	1857	1866
Carey, Abel	Salem	1852	1872
Carrol, Thomas	Cincinnati . . .	1854	1871
Chamberlain, E. K. . .	Cincinnati . . .	1847	1847
Chase, B. S.	Akron	1870	1878
Conner, P. S.	Cincinnati . . .	1853	1854
Cook, Charles C. . . .	Youngstown, . .	1862	1863
Cook, F.	Atwater	1852	1857
Cox, D. A.	New Paris . . .	1846	
Crook, James M. . . .	Dayton	1853	
Crume, P. M.	Eaton	1847	1869
Danna, M.		1849	
Dawson, John	Columbus . . .	1851	1866
Dean, G. A.	McComb	1874	1875
Dean, W. F.	Milan	1857	*Army.*
Delemater, John	Cleveland . . .	1850	1867
Dodge, I. S.	Cincinnati . . .	1854	1872
Doherty, G. A.	Cincinnati . . .	1868	1873
Dolman, Wm.	Cleveland . . .	1852	
Ellis, G. E.	Lithopolis . . .	1849	1867
Farrell, T. J.	Columbus . . .	1873	1880
Farrington, S. H. . . .			1875
Foote, H. E.	Cincinnati . . .	1854	1871
Fries, George	Cincinnati . . .	1862	1866
Fyffe, E. P.	Urbana	1851	1867
Gabriel, R. W.	Dublin	1854	1860
Gailey, J. D.	Marion	1851	
Gans, S.	Cincinnati . . .	1861	1864
Gard, B. F.	Columbus . . .	1847	1849
Gatson, E.	Morristown . .	1849	1868
Gille, L. C. C.	Westville . . .	1853	
Green, M.	Cambridge . . .	1855	1856
Griswold, Wayne . . .	Circleville . . .	1866	
Haggott, J. P.	Eaton	1861	1862
Haines, Job	Dayton	1853	1860
Haines, V.	Cambridge . . .	1853	1865

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Hall, W. C.	Fayetteville, . .	1859	1872
Hall, C. B.	KeystoneFurn'ce		1876
Helmick, G. W.	Harrisburg . . .	1848	
Henderson, W.	Delaware . . .	1848	1866
Hills, Ralph	Delaware . . .		1879
Hopkins, Rudd C. . . .	Newburg . . .	1852	*Army.*
Hornbeck, L.	New Carlisle . .	1849	1865
Howard, R. L.	Columbus . . .	1846	
Hughes, J. W.	Berlin Centre . .	1858	1869
Hurxthall, F. T. . . .	Massillon . . .	1849	
Johnson, Wm.	Delaware . . .	1850	
Jones, A. B.	Portsmouth . .	1868	1876
Judkins, J. P.	Cincinnati . . .	1846	1867
Judkins, Wm.	Cincinnati . . .	1847	1861
Kable, W. R.	Bellebrook . . .	1846	1859
Keever, M. H.	Ridgeville . . .	1850	1878
Kennedy, J. L.	Batavia	1864	1866
Kineman. J. W.	Ashland	1870	1874
Kreider, M. Z.	Lancaster . . .	1846	1852
Kyle, J. G.	Xenia	1856	1870
Lathrop, H.	Columbus . . .	1846	1849
Lawson, L. M.	Cincinnati . . .	1853	1864
Little, J. A.	Delaware . . .		1877
Longworth, L. R. . . .	Cincinnati . . .	1875	1879
Marshall, N. T.	Cincinnati . . .	1854	
Martin, Joshua	Xenia	1853	1857
Matson, A. F.	Logansville. . .	1857	1867
McBride, Alex.		1865	1876
McCracken, W. A. . .	Springfield . . .	1867	
McGuire, W. B. . . .	Waynesville . .	1848	
McMeans, R. R. . . .	Sandusky. . . .	1854	1862
McNeal, F. D.	Canal Dover . .	1854	
McDonald, W. J. . . .	Portsmouth . .	1872	1878
Mendenhall, G.	Cincinnati . . .	1854	1874
Merriman, A.	Madison	1853	1867
Metz, Abram	Massillon . . .	1852	1875
Millikin, Samuel	Hamilton . . .	1853	
Mitchell, G. F.	Mansfield . . .	1850	1869

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Mitchell, M.	Mansfield . . .	1863	1864
Moore, Jonas	Marietta	1852	1856
Morehead, W.	Zanesville . . .	1855	1861
Mount, William . . .	Cumminsville . .	1853	1866
Mussey, R. D.	Cincinnati . .	1847	1866
Naw, J. H.	Carroll	1873	1875
Norton, J. C.	Marion	1848	
Oliver, J. Q.	Cincinnati . . .	1854	
Paige, W. F.	Johnstown . . .	1864	1878
Pease, L. T.	Williamsburg . .	1863	1874
Peck, W. V.	New Richmond.	1872	
Potter, J. F.	Cincinnati . . .	1854	1868
Purple, J. G.	Brooklyn . . .	1853	
Putnam, J.	Gahn	1873	1873
Reid, J. T.	Fairfield	1864	1864
Rigdon, L.	Hamilton . . .	1853	1865
Risinger, J. F.	Galion	1849	1866
Rives, L. C.	Cincinnati . . .	1850	1870
Robertson, James . . .	Perrysburg. . .	1853	1854
Rodgers, Robt.	Springfield . . .	1853	1880
Rodman, Thomas S. . .	Cleveland . . .	1852	
Russell, I. W.	Mount Vernon .	1870	1876
Sachse, G. J.	Columbus . . .	1846	1860
Sanders, Moses	Norwalk	1853	
Shædford, R J.	Midway	1854	1868
Sharpe, E. C.	Williamsburg. .	1859	1868
Sheppard, W. A. . . .	New Vienna . .	1856	1872
Shotwell, John T. . . .	Cincinnati . . .	1850	1850
Silver, D. H.	Columbus . . .	1851	1864
Skinner J. S.	Columbus . . .	1849	
Smith, A. C.	Medina	1852	1861
Smith, Edmund		1850	1850
Smith, Harry	Mount Vernon .	1869	1874
Smith, J. A.	Piqua	1853	1858
Smith, S. M.	Columbus . . .	1846	1874
Smith, James	Clavington . . .	1876	1877
Spillman, Henry	Medina	1855	1862
Stanton, Benjamin . . .	Salem	1852	1861

NAME.	P. O. ADDRESS.	ADMITTED.	DIED.
Story, R.	Cleveland. . . .	1852	1866
Taggart, T. M.	Dalton.	1857	1867
Taliaferro, Wm. T. . .	Cincinnati . . .	1854	1871
Thompson, J. W. . . .	Columbus . . .	1860	1862
Thompson, M.	Mount Vernon .	1850	1867
Thompson, Robert. . .	Columbus . . .	1846	1865
Thomas, K. G.	Alliance	1858	1869
Thorn, E.	Yellow Springs .	1867	1876
Tilden, Daniel.	Sandusky. . . .	1856	1870
Tilden, D. J.	Toledo.	1850	
Tullis, J. W.	Troy	1851	
Turney, S. D.	Circleville . . .		1878
Van Pearse, James . . .	Columbus . . .	1850	
Van Tuyl, D. R. . . .	South Bend . .	1850	
Van Tuyl, H.	Dayton	1053	
Waddel, Thomas. . . .	Toledo	1878	1879
Wallace, R	Lewisburg . . .	1861	1865
Weatherby, A. S. . . .	Cardington. . .	1865	1870
White, John.		1848	
Wigton, A. E.	Delaware. . . .	1861	1864
Woodward, Chas. . . .	Cincinnati . . .	1857	1872
Woody, Robert	Eaton	1863	1872
Wright, M. B	Cincinnati . . .		1879
Williams, T. B.	Delaware . . .	1860	1879

LIST OF MEMBERS

OF THE

OHIO STATE MEDICAL SOCIETY,

WITH

POST OFFICE ADDRESS AND DATE OF ADMISSION.

LIST OF MEMBERS

OF THE

OHIO STATE MEDICAL SOCIETY,

With Post Office Address and Date of Admission.

NAME.	P. O. ADDRESS.	ADMITTED.
Adams, D. P	Columbus	1875
Adams, John M	Washington C. H.	1874
Agard, Aurelius H	Sandusky	1853
Alcorn, A. W	Ravenna	1870
Allen, D. B	West Liberty	1865
Allen, Dudley	Oberlin	1870
Almick, M. L	Cincinnati	1874
Andrus, A	Westerville	1872
Asbury, T. B	Worthington	1878
Arms, Chas. C	Cleveland	1880
Ayres, J. H	Urbana	1876
Ayres, S. C	Cincinnati	1877
Baker, Norman	Lucas	1858
Baldwin, J. F	Columbus	1875
Ballinger, J. B	Versailles	1880
Ballinger, Wm. J.	Plain City	1864
Banning, J. C	Round Head	1876
Barker, W. M.	Attica	1876
Barnes, W. T.	Fredricksburg	1879
Bartlett, E. P.	Genoa	1874
Battles, W. S.	Shreve	1858
Beach, A. J	Belleville	1863
Beach, A. P.	Seville	1880
Beach, J. N.	West Jefferson	1854
Beach, T. D.	Catawba	1874

NAME.	P. O. ADDRESS.	ADMITTED.
Beach, W. M.	London	1879
Beagrand, Pierre	Fremont	1853
Beardsley, C. E.	Ottawa	1869
Beeman, E. E.	Wakeman,	1880
Belden, A. C.	Akron	1878
Bell, A. W.	Bloomsville	1877
Bell, A. E.	Zanesville	1855
Belts, Mrs. Helen L.	Youngstown	1875
Bennett, P. C.	Garretsville	1870
Bennitt, John	Cleveland	1869
Berger, S. H.	Toledo	1874
Berlin, E.	Wapakoneta	1868
Besse, H.	Delaware	1868
Bevington, J. S.	Berlin	1878
Bigelow, Asa	Toledo	1874
Bigney, P. M.	Cincinnati	1871
Bing, J. P.	Portsmouth	1851
Bington, Joseph	Williamstown, Va.	1876
Bishop, S. P.	Delta	1870
Blake, H. C.	Lockbourne	1878
Blake, W. H.	Shadeville	1878
Bland, Jerome	Poplar	1876
Blesch, P. E.	Columbus	1869
Blymeyer, A.	Delaware	1868
Bœrstler, G. W.	Lancaster	1870
Bond, J. W.	Toledo	1874
Bookwater, W. S.	Miamisburg	1879
Boone, Alonzo	Harrisburg	1879
Bowen, A. H.	Waterford	1878
Boylan, A.	Milford Centre	1878
Bramble, D. D.	Cincinnati	1870
Brainerd, A. C.	Orangeville	1870
Brainerd, H. C.	Cleveland	1870
Bricker, W. R.	Shelby	1848
Brinkerhoof, D. H.	Fremont	1853
Brison, H. C.	Millerspoint	1877
Brockett, A. J.	Bristolville	1874
Brown, S. H.	Dennison	1876

NAME.	P. O. ADDRESS.	ADMITTED.
Brook, G. W.	Ellsworth	1858
Brooks, Mrs. S.	Akron	1875
Brundage, A. H.	Xenia	1878
Brush, E. C.	Columbus	1878
Bryant, W. G.	Springfield	1871
Buckner, J. H.	Cincinnati	1863
Buckingham, E. V. B	Centerton	1874
Buechner, W. L.	Youngstown	1879
Buffett, Lewis	Cleveland	1880
Bunce, Wm.	Oberlin	1864
Bulen, Joseph	Grove City	1856
Burr, J. N.	Mount Vernon	1853
Burton, E. D.	Collamer	1880
Butler, Geo O.	Cleveland	1870
Butler, G. W.	Columbus	1869
Cake, W. M.	W. Independence	1875
Caldwell, W. W.	Hamilton	1874
Campbell, J.	Dennison	1876
Campbell, W. H.	Vanceburg, Ky.	1871
Carmichael, W. A.	Loveland	1871
Carpenter, Julia W.	Cincinnati	1879
Carson, W. B.	McComb	1874
Carson, Wm.	Cincinnati	1871
Carrick, A. L.	Cincinnati	1871
Case, Guy B.	Cleveland	1880
Casgrove, Thomas	Sylvania	1875
Cassat, M.	Cincinnati	1870
Chamberlain, D. H.	Toledo	1877
Chamberlain, D. P.	Toledo	1874
Chapman, W. C.	Toledo	1875
Chase, James L.	Toledo	1874
Cherry, Wm.	Toledo	1874
Chisholm, J. W.	Mt. Perry	1873
Clark, Henry P.	Ashland	1862
Clark, John H.	Mechanicsburg	1869
Clark, M. S.	Youngstown	1865
Coldham, Jas.	Toledo	1874
Coleman, N. R.	Columbus	1875

NAME.	P. O. ADDRESS.	ADMITTED.
Collamore, G. A.	Toledo	1880
Conklin, H. S.	Sidney	1849
Conklin, W. J.	Dayton.	1868
Conner, P. S.	Cincinnati	1868
Constant, W. S.	Delaware	1866
Cooney, H.	Bryan	1875
Corey, John M.	Fremont	1874
Corson, John	Middletown	1866
Corson, O. M.	Trenton	1879
Corwell, H. G.	Youngstown.	1874
Cotton, J. D.	Marietta	1852
Coulson, E. G.	Pennsville	1875
Courtwright, A. P	Circleville.	1871
Courtwright, G. S.	Lithopolis.	1867
Cox, J. M.	South Salem.	1877
Crafts, J.	Cuyahoga Falls	1880
Crafts, John M.	Mantua.	1874
Craig, J. W.	Mansfield.	1874
Cretcher, Wm. H.	Bellefountaine.	1880
Culbertson, Howard	Zanesville.	1855
Culbertson, J. C	Cincinnati	1880
Culver, B. F.	Belpre	1874
Curry, J. H	Toledo	1876
Cushing, H. K.	Cleveland	1857
Cushing J. T.	Huron	1880
Cuykendall, M. C.	Bucyrus.	1874
Dandridge, A. S	Cincinnati.	1854
Dandridge, N. P	Cincinnati.	1871
Darby, J. E	Cleveland	1880
Darwin, Henry W	Gettysburg	1859
Daugherty, J. D	Dayton	1879
Davis B. W	Marion	1878
Davis, John	Dayton	1853
Davis, John	Cincinnati	1854
Davis, Wm. B	Cincinnati	1865
Davy, R. B	Cincinnati	1875
Dawson, W. W.	Cincinnati	1853
Dean, Geo. A	McComb	1874

NAME.	P. O. ADDRESS.	ADMITTED.
DeBra, J. F.	Miamisburg	1879
Denig, R. M.	Columbus	1851
Denman, M. N.	West Unity	1874
Dickey, Thomas A	Middletown	1879
Dickson, M. M.	Johnstown	1877
Donahoe, H. J.	Sandusky	1854
Donnellan, J. E	Germantown	1879
Dorland, W. L.	Chicago, Ills.	1878
Douglass, W. W.	Toledo	1874
Downs, Samuel	Waterville	1876
Drake, I. L	Lebanon	1859
Drury, Wm. H.	Columbus	1859
DuBois, E. B	Dayton	1879
Dumm, S. C.	Constantia	1877
Duncan, James A.	Toledo	1874
Dunlap, Alexander	Springfield	1854
Dunlap, A. S.	Dayton	1868
Dunlap, C. W	Springfield	1869
Dutton, C. F.	Cleveland	1880
Dwyer, R. S.	Samantha	1879
Ealy, A. E	Dayton	1879
Ebright, L. S.	Wadsworth	1870
Eckman, Hiram	Tuscarawas	1869
Edwards, J. D	Xenia	1867
Ellsberry, W. W.	Georgetown	1874
Erwin, R. W.	Bay City, Mich.	1872
Estep, William	Lloydsville	1852
Evans, Geo. B.	Middletown	1879
Evans, R. P.	Franklin	1879
Everhard, N. S.	Wadsworth	1870
Ewing, James	Hebron	1875
Fackler, J. E.	Versailles	1879
Falconer, Cyrus	Hamilton	1854
Fenneberg, Gustavus	Toledo	1874
Ferrell, C. B.	Columbus	1878
Finch, C. M.	Portsmouth	1869
Firestone, J. L.	Salem	1870
Firestone, L.	Columbus	1852

NAME.	P. O. ADDRESS.	ADMITTED.
Firmin, F. W	Findlay	1874
Fisher, A. W.	Toledo	1875
Fisher, P. Q.	Nashport	1873
Fisher, W. S.	Bridgeport	1876
Follett, Alfred.	Granville	1864
Forbes, S. F.	Toledo	1856
Ford, J. B.	Norwalk	1876
Foster, Nathaniel	Cincinnati.	1854
Fowler, C. R.	Lima.	1880
Fowler, S. W.	Delaware	1873
Franklin, G. S	Chillicothe	1876
Frizzell, W. A.	Freestone	1872
Fuller, A. B.	Loudonville	1868
Fuller, S. W.	Bellefountaine	1853
Gabriel, J. F.	Piqua.	1856
Galbraith, E. J.	Frankfort	1876
Galer, Frank M.	DeGraff.	1874
Gardner, G. W.	Harrisburg	1873
Gawne, A. J.	Cleveland	1870
Gay, N.	Columbus.	1848
Geer, F. H.	Rock Creek	1880
Gerwe, F. A. J.	Cincinnati	1854
Gibson, Richard McD.	Tiffin	1871
Gilchrist, R. S.	DeGraff.	1856
Gillespie, J. M.	Bloomingsburg.	1880
Gilliam, D. T	Columbus	1873
Glen, Mrs. G. C	Van Wert.	1875
Goble, P.	Worthington	1849
Gonsaulis, C.	Sparta	1863
Goodlove, Wm.	Monterey	1874
Goodson, J. W.	Bellevue	1874
Gordon, T. W.	Georgetown	1849
Graefe, Phillip	Sandusky	1875
Graefe, Wm.	Sandusky City.	1874
Granger, B. D.	Russell Station.	1878
Gray, F. C.	Lewisburg.	1879
Gray, S. S.	Piqua.	1867
Greenamyer, P. S.	Smithville.	1875

NAME.	P. O. ADDRESS.	ADMITTED.
Green, H. S.	Cardington	1878
Green, J. W	Fairfield	1853
Grissell, E.	Salem	1876
Guittard, F	Coshocton	1875
Hadlock, J. W.	Cincinnati	1871
Hague, J. H.	Nashville	1874
Hale, R. W.	Fostoria	1875
Halderman, D.	Columbus	1869
Hall, C.	Burlington	1872
Hall, C. B.	Miller's	1872
Hamilton, J. W	Columbus	1849
Hammel, M. J.	Circleville	1878
Harmon, Julian	Warren	1857
Harrison, Eugene B	Napoleon	1869
Hart, B. F	Marietta	1854
Hart, C. S.	Marietta	1877
Hartman, S. Duff.	Tippecanoe City	1874
Hays, R. P.	Vienna	1880
Hedges, W. B.	Beverly	1878
Heighway, A. E.	Cincinnati	1870
Heiter, Carl.	Sandusky	1875
Helbish, F. S.	Green Springs	1876
Helmick, G. W.	Harrisburg	1878
Helmick, S. C.	Commercial Point	1873
Helmick, J.	Harrisburg	1878
Henderson, D. W.	Marysville	1856
Henderson, J. P.	Newville	1850
Henderson, R. A.	Upper Sandusky	1865
Hendrickson, Hugh	Columbus	1868
Herrick, H. J.	Cleveland	1868
Herrick, L. C.	Woodstock	1871
Hewetson, A. H.	St. Clairsville	1878
Heyl, E.	Columbus	1878
Hildreth, C. C.	Zanesville	1853
Hill, N. S.	Melville	1866
Hill, H.	West Alexandria	1867
Hiner, S. B	Lima	1874
Himes, Isaac N	Cleveland	1874

NAME.	P. O. ADDRESS.	ADMITTED.
Hines, J. A	Van Wert	1879
Hixson, C. C	Hillsboro	1877
Hobson, J. A	Flushing	1880
Hohly, Frederick	Toledo	1874
Hoff, J. W	Pomeroy	1872
Holdt, George	Cincinnati	1871
Holliday, B. W	Cleveland	1875
Hoover, C.	Ross	1880
Hoover, T. C	Columbus	1873
Hough, J. B.	Waynesville	1869
Hough, W. S	Cuyahoga Falls	1875
House, A. F.	Cleveland	1880
Hovey, A. B	Tiffin	1875
Howard, E. W.	Akron	1852
Howard, H. C.	Akron	1877
Hubbard, J. C.	Ashtabula	1856
Huestis, Isaac	Chester Hill	1869
Hughes, M. A.	Sandusky	1877
Humiston, W. H.	Cleveland	1880
Hunt, A. H.	Blackleyville	1868
Hunter, F. S.	Ashland	1878
Hurd, A.	Findlay	1870
Huston, R. C.	Oxford	1868
Hutchings, Guy	Toledo	1880
Hyatt, E. H.	Delaware	1862
Hyde, Wm.	Wauseon	1871
Iddings, A. B.	Dayton.	1879
Isham, A. B.	Walnut Hills	1871
Jackson, E. H.	Lancaster	1878
Jenkins, M. J.	Plain City	1880
Jennings, E.	Dayton	1867
Jewett, W. H.	West Canaan	1869
Jewett, H. S.	Dayton	1871
Jobes, J. A.	German	1870
Johnson, Homer	Oberlin	1880
Johnson, O.	Worthington	1878
Jones, Carrie, L.	Kinsman	1880
Jones, Allen	Kinsman	1880

NAME.	P. O. ADDRESS.	ADMITTED.
Jones T.	London	1878
Jones, T. W.	Columbus	1847
Jones, L. M.	West Liberty	1869
Jones, R. E.	Gomer	1863
Jones, W. W.	Toledo	1849
Jones, J. D.	Newburg	1870
Jones, P. E.	Wauseon	1874
Judkins, C. P.	Cincinnati	1878
Junkens, M. W.	Bellaire	1859
Kay, Isaac	Springfield	1853
Kearney, T. H.	Cincinnati.	1871
Kelly, H. R.	Galion	1868
Kelsey, L. S.	Cincinnati	1879
Kemp, J. D.	Dayton	1868
Kemper, A. C.	Cincinnati.	1871
Kennedy, J. C.	Batavia	1854
Kendig, E. V.	Haynesville	1874
Keyt, A. T.	Walnut Hills	1850
King, E. L.	Ashtabula	1880
Kinsman, D. N.	Columbus	1864
Kingham, Joseph	Port Clinton	1875
Kitchen, H. W.	Cleveland	1874
Kirkley, C. A.	Toledo	1874
Knowlton, A. P.	Olmstead Falls	1870
Kurz, C. E.	Bellaire	1875
Krause, Bernard	Cleveland	1880
Kroesen, J. C.	Columbus	1878
Landon, C. P.	Westerville	1851
Landis, H. G.	Columbus	1878
Larimore, James	Newark	1875
Larimore, F. C.	Mt. Vernon	1871
Lash, H. M.	Athens	1879
Lash, J. W.	Athens	1879
Lawless, J. T.	Toledo	1874
Lee, E. B.	Garretsville	1870
Lee, H. J.	Cleveland	1880
Lenhart, P. J.	Wauseon	1880
Leland, A. G.	Trumbull	1884

NAME.	P. O. ADDRESS.	ADMITTED.
Leonard, B. B.	West Liberty . .	1854
Leslie. J. M.	Frankfort	1878
LeVan, D. H.	Mt. Victory . . .	1879
Lewis, Edward C.	Canal Dover . . .	1870
Lewis, W. C.	Rushville	1869
Lisle, J. M.	Pataskala	1878
Loller, W. B.	Uhrichsville . . .	1864
Longfellow, A. J.	Fostoria.	1861
Loving, S.	Columbus	1858
Lowman, J. H.	Cleveland	1877
Ludington, H	Cincinnati. . . .	1871
Ludlow, J.	Cincinnati	1871
Lyman, C. N	Wadsworth . . .	1852
Mack, John	Shelby	1853
Mann, H. L.	Wapakoneta . . .	1875
Martin, Chancellor	Fort Seneca . . .	1879
Martin, George	Huron	1877
Matchett, W. H	Greenville	1862
Mills, J. T.	Jersey	1878
McCarty, Oliver	Polk	1858
McCasky, H.	Felicity	1868
McClellan, R. M	Xenia	1875
McClure, James	Marietta	1866
McCollum, E. J	Tiffin	1871
McConnelly, F. C.	Vermillion . . .	1875
McCracken, J. W.	Portage	1877
McCurdy, John	Youngstown. . .	1870
McCullough, J. G	Bealsville	1868
McCullough A. M. F . . .	Bealsville	1874
McEbright, Thomas G . .	Akron	1866
McElwe, S.	Newcastle . . .	1866
McFarland, J. A	Tiffin	1850
McGee, J. B.	Cleveland	1880
McGraw, Aaron	Burton	1869
McGrew, Henry	Montgomery . .	1878
McGuire, D. J.	Norwalk.	1870
McIlhenny, J. J.	Dayton	1846
McLaughlin, A. C	Tremont City . .	1852

NAME.	P. O. ADDRESS.	ADMITTED.
McLaughlin, K	Butler	1869
McMann, E. W	Napoleon	1875
McMillen, J. W	Mt. Vernon	1878
McMurray, A. B.	Marion.	1879
McNutt, A. C	Bucyrus	1878
McNutt, H. E	Huron	1877
Mead, M. L.	Cleveland	1875
Merrill, A. E	Vermillion.	1876
Metcalf, C. T.	Warren	1870
Metzler, A. S	Buena Vista	1874
Miles, A. J	Cincinnati	1869
Miller, A. C.	Cleveland	1858
Miller, C. A.	Cincinnati	1871
Minnick, W. H.	Wapakoneta	1879
Mitchell, George	Mansfield	1868
Moore, A. C.	Amelia	1869
Moore, C. H.	Hardin	1879
Moore, Eugene L.	Moscow.	1868
Moore, F. P.	New Lisbon	1880
Moore, G.	Kinsman	1878
Moore, James	Ironton	1872
Moore, William	New Lisbon	1865
Morgan, Chas. L.	Westfield	1880
Morris, Jonathan	Ironton	1853
Morris, Joseph	Columbus Grove	1879
Morse, D. A.	Springfield.	1868
Mory, J. J.	St. Henry	1871
Mosgrove, W. A.	Urbana	1875
Mounts, J. L.	Morrow.	1860
Mouser, J. A	La Rue	1870
Mullen, T. J.	New Richmond	1855
Murbach, A. J.	Archibald	1874
Murphy, J. A	Cincinnati	1872
Murray, L. S	Madina	1870
Muscroft, C. S.	Cincinnati	1854
Mussey, W. H.	Cincinnati	1854
Myers, Benjamin	Ashland	1874
Nash, W. H. H	Columbus	1874

NAME.	P. O. ADDRESS.	ADMITTED.
Nau, J. G.	Carroll	1878
Neal, T. L.	Dayton	1863
Neil, Alexander	Columbus	1868
Nelson, H. W	Steubenville	1878
Newman, J. E.	Gilboa	1880
Nolan. J. G	Toledo	1874
Norman, Frank	Columbus	1873
Nourse, J. D.	Lancaster	1873
Nunemaker, H. B	Columbus	1875
Orr, G. B	Cincinnati	1871
Osborn, A. L	Peru	1875
Otis, W. D	Pataskala	1878
Owsley, J. B.	Jacksonburg	1871
Paige, W. N.	Johnstown.	1878
Palmer, C. D	Cincinnati	1871
Pape, Leopold	Sandusky	1875
Patterson, A. V	Mansfield	1861
Patterson, W. S	New Lexington	1874
Paul, T. E.	Ottawa	1877
Pearce, Enoch, Jr	Steubenville	1859
Pearce, H. C.	Urbana	1867
Pearce, L. C.	Cable.	1869
Perrier, John	Cleveland	1880
Philips, W. H.	Kenton	1866
Pickard, P.	Mt. Vernon	1878
Pixley, M. S.	Portsmouth	1873
Pixley, Sumner.	Cleveland	1870
Pollock, Calvin	Donnelsville	1873
Pomerene, P. P	Berlin	1870
Pomerine. Joel.	Millersburg	1858
Pomeroy, O.	Chardon	1869
Pooley, J. H.	Columbus	1876
Potter, J. B	Canal Winchester	1847
Pratt, E. B	Mt. Sterling	1869
Prentice, O	Monroeville	1880
Preston, J. C.	Cleveland	1857
Price, Joseph	Randolph	1852
Priest. S. C	Newark.	1878

NAME.	P. O. ADDRESS.	ADMITTED.
Priest, Jonathan	Toledo	1874
Primrose, J. P.	Nelsonville	1872
Pullen, G. W	Logan	1864
Quinn, J. J	Cincinnati	1875
Rabe, B. A	Cleveland	1880
Randall, R.	Bath	1870
Ranney, S. W.	Hope.	1878
Ransohoff, Joseph	Cincinnati	1879
Reamy, T. A	Cincinnati.	1855
Reed, A. B.	Brooklyn	1870
Reed, A. N	Norwalk	1870
Reed, C. H	Toledo	1873
Reed, J. G	West Chester	1879
Reed, J. T	Massillon	1875
Reed, E. J	Leipsic	1878
Reed, R. C. S.	Jones' Station	1867
Reed, Wm	Iberia.	1865
Reeve, J. C.	Dayton.	1861
Rezner, W. B.	Cleveland	1880
Reid, J. L.	Van Wert.	1874
Rice, J. B.	Fremont	1868
Rice, Robt. H	Fremont	1880
Ridenour, A. W.	Massillon	1875
Ridenour, W. T	Toledo	1870
Ridgway, N. B.	Galion	1878
Riggs, J. U.	Bryan.	1873
Robertson, Charles.	McConnelsville.	1849
Robinson, J. D.	Wooster.	1856
Rogers, J. G.	New Richmond	1853
Root, H. A.	Toledo	1874
Rosenfeldt, A	Cincinnati.	1871
Rosenwasser, M	Cleveland	1880
Russ, R. C	Hillsborough	1879
Russell, E. S.	Tuscarawas	1880
Russell, J. W	Mt. Vernon	1848
Sadler, J	Columbus.	1878
Salisbury, J. N.	Russelville.	1872
Sauer, Mrs. P. B.	Napoleon	1875

NAME.	P. O. ADDRESS.	ADMITTED.
Saunders, H.	Oxford	1879
Saylor, Wm.	Gratis	1871
Scarf, W. D.	Bellefontaine. . .	1855
Scheibenzuber, A.	Dayton	1879
Schnetzler, H. M.	Toledo	1874
Schueller, J. B.	Columbus	1869
Schwab, Lewis.	Portsmouth . . .	1872
Schwan, F. W.	Poplar	1880
Scott, A. J	Loudonville . . .	1870
Scott, Annie K.	Cleveland	1880
Scott, W. A.	Swanton	1878
Seott, W. J	Cleveland . . .	1855
Scott, Xenophon C. . . .	Cleveland	1874
Scoville, S. S.	Lebanon	1859
Seaton, A. M	Cross Roads. . .	1869
Seely, W. W.	Cincinnati. . . .	1871
Sellers, A.	Lebanon	1867
Senour, J. G.	Troy	1878
Senseman, H	Tremont City . .	1871
Severance, R. A	Bellevue	1874
Shackleton, E. L.	Auburn. California	1871
Sharp, Joseph	Sugar Grove. . .	1878
Shepherd, W. E. W . . .	Nelsonville . . .	1873
Shepherd, W. W.	Hillsboro	1871
Shoemaker, J. M.	Napoleon	1869
Sidwell, N. H	Wilmington . . .	1871
Silver, D. R.	Sidney	1870
Sinnett, E.	Granville	1850
Slocum, Charles	Defiance	1874
Smith, C. T	Middleport . . .	1873
Smith, D. B.	Cleveland	1870
Smith, H. L.	Bloomingburgh. .	1878
Smith, James	Clarington. . . .	1876
Smith, S. D	Lockington . . .	1874
Smith, S. H.	Mecca	1880
Smith, W. K.	Deersville	1875
Snodgrass, J.	Kenton	1878
Snyder, D. J.	Scio	1850

NAME.	P. O. ADDRESS.	ADMITTED.
Souders, Samuel	Dayton	1879
Southard, J. M.	Marysville	1860
Sparrow, T. R.	Columbus	1873
Speer, A. T	Newark	1878
Spees, S. J.	Hillsboro	1863
Spinning, P. T.	Springfield	1876
Spooner, H. K.	Republic	1880
Sprague, James	London	1866
Stanley, E.	Sandusky	1870
Stark, W.	Cincinnati	1871
Stansell, J. A.	Forest	1866
Stanton, Byron	Cincinnati	1871
Steeley, E. E.	Anna	1877
Steeley, H. J.	Anna	1869
Stein, Geo. T.	Columbus	1873
Stephenson, J. H.	Leesville	1860
Stephenson, Y.	Georgetown	1872
Stevens, E. B	Lebanon	1853
Steward, S. H.	Columbus	1869
Stewart, C. A.	Lynchburg	1879
Stewart, T. H.	Church Hill	1877
Stillwell, Thomas	Fremont	1857
Stockstill, J. W.	New Carlisle	1867
Storch, A. B.	Milan	1880
Stouffer, C. C.	West Salem	1878
Sweney, R. L.	Marion	1859
Sykes, W. H.	Plymouth	1870
Taggart, E. Curtis	Hilliard	1871
Tappan, Benjamin	Steubenville	1852
Tauber, B.	Cincinnati	1876
Taylor, W. H.	Cincinnati	1874
Thomas, B. A.	Rushville	1878
Thompson, J. B.	Columbus	1846
Thompson, J. C.	South Bloomfield,	1848
Thompson, W. R.	Troy	1871
Thorn, E. J.	Yellow Springs	1878
Thorn, S. S.	Toledo	1873
Thurston, R. C.	Oxford	1868

NAME.	P. O. ADDRESS.	ADMITTED.
Tichnor, E. J.	Lebanon	1869
Tipton, T. C.	Williamsport . .	1878
Tobey, H. A.	Dayton	1878
Todd, Frank H.	Painesville	1880
Townsend, Clark	Cleveland	1880
Tupper, C. E.	Ottawa.	1874
Underhill, J. W.	Cincinnati	1874
Underwood, A. H.	London	1869
Underwood, W. J. . . .	Akron	1869
Vail, D. W.	New Haven . . .	1874
Vanatta, E.	Fultonham . . .	1855
Vance, D. M.	Urbana	1876
Vandervort, J. W.	Harveysburg . .	1864
Vaughters, Thos. G. . . .	Portsmouth . . .	1872
Voorhees, S. R.	Mason	1873
Waddick, J. M.	Toledo	1873
Wade, D. E.	Cincinnati	1854
Wagenhals, P. M.	Columbus	1869
Waggoner, Joseph	Ravenna	1870
Wallace, John	Rushsylvania . .	1879
Wallace, J. P.	Bellefontaine . . .	1879
Walton, Geo. E.	Cincinnati	1871
Wallace, J. H.	Smithville	1870
Ward, C. S.	Warren	1875
Ward, W. A.	Conneaut	1880
Warner, A. D.	Fullertown . . .	1880
Warren, Sara J.	Cleveland	1880
Waterman, H. C.	Middleport . . .	1868
Weaver, J. M.	Dayton	1865
Weber, G. C. E.	Cleveland	1857
Webster, E. M.	Kingsview . . .	1876
Weed, F. J.	Cleveland	1870
Weed, T. A.	Cleveland	1880
Welsh, B. F.	London	1859
Welsh, J. M.	Deersville	1873
Wellons, G. S.	Barnesville . . .	1878
Westbrock, A. E.	Ashley	1872
Vest, T. J.	Melmore	1875

NAME.	P. O. ADDRESS.	ADMITTED.
White, J. H.	Delaware	1866
Whitehead, A. M.	Springfield . . .	1871
Whiting, L. M.	Canton	1870
Whitmar, Joel E.	Mt. Hope	1874
Whittaker, J. T.	Cincinnati	1871
Wiggins, C. W.	Big Plain	1869
Wilbur, A. M.	West Unity . . .	1874
Wilkins, John A.	Delta	1874
Wise, S. P.	Millersburg . . .	1875
Wilson, Albert	Sidney	1854
Wilson, D. C.	Ironton	1872
Wilson, J. L.	Greenfield	1871
Wilson, Samuel	Wooster . . .	1854
Willson, W. H.	Greenfield	1865
Willard, G. P.	Tiffin	1875
Williams, A. S.	Fostoria	1852
Williams, E.	Cincinnati	1856
Williams, T. B.	Delaware	1860
Williams, A. L.	North Lewisburg,	1871
Williams, J. L.	Cardington . . .	1878
Williams, M. L.	Vienna	1880
Willis, P. A.	Bellepoint	1868
Wirth, R.	Columbus	1865
Wolfley, W. J.	Columbus	1873
Wood, D. B.	Warren	1852
Wood, D. M.	Warren	1875
Wood, J. S.	Collinswood . . .	1880
Woodbridge, T.	Youngstown . . .	1870
Woodruff, L.	Alton	1867
Woods, J. R.	Mendon	1871
Woodward, W. R.	Cincinnati	1871
Wright, S, St. J.	Tallmadge . . .	1880
Wylie, A. N.	Ripley	1866
Wylie, J. L.	Ripley	1872
Yates, Porter	Green Spring . .	1875
Yost, W. N.	Mt. Blanchard . .	1879

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E. L. Hill, Oxford.
Wm. Trevitt, Columbus.
L. W. Moe, Ottawa.
Richard Gundry, Catonsville, Maryland.
Roberts Bartholow, Philadelphia, Pa.

*Deceased.

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Professor Isidor Neumann, Vienna, Austria.

Professor Herman Widerhofer, Vienna, Austria.

Professor Carl Sigmund, Vienna, Austria.

Professor Hermann Zeissl, Vienna, Austria.

Professor Ed. C. Seaton, Medical Inspector of the Privy Council, London, England.

Professor M. Jules Guerin, Member Imperial Academy of Medicine, Paris, France.

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